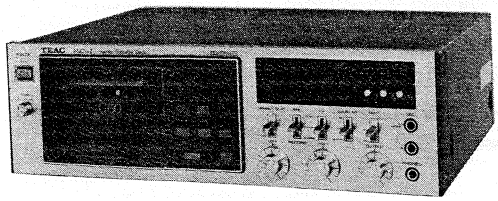
TEAC®



SERVICE MANUAL

A-510MKII/A-500MKII

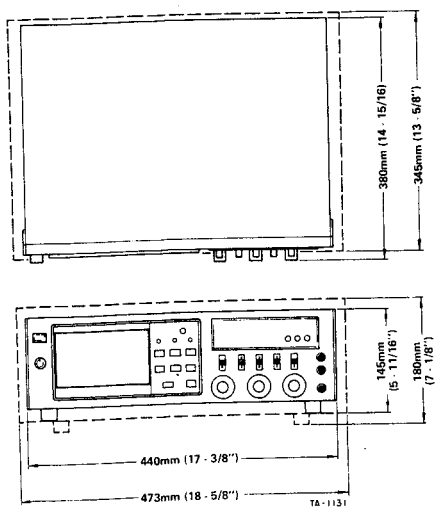
Stereo Cassette Deck

5704002400

1 SPECIFICATIONS AND SERVICE DATA

SPECIFICATIONS

Track System 4-track, 2-channel stereo
2 Heads Erase and Record/Playback
Type of Tape Cassette tape, C-60 and C-90 (Philips type)
Tape Speed 4.8 cm/s (1-7/8 ips)
Input (level and impedance)
MIC: Specified input level; −57 dB (1.09 mV)/10 kohms
Min. input level; −67 dB (346 μV)
LINE IN: Specified input level; −9 dB (275 mV)/50 kohms
Min. input level; −19 dB (86.9 mV)
DIN*1: Min. input level; −35 dB (13.8 mV) (Europe Model only)
*1 Pursuant to DIN standards
Outputs (level and load impedance)
OUTPUT: Max. output level; −2.5 dB (580 mV)/50 kohms
Specified output level; −5 dB (436 mV)
Headphones: Specified output level; −15 dB (138 mV)/8 ohms
Equalization
METAL: 3180 μs + 70 μs
$CO(CrO_2)$: 3180 μs + 70 μs
NORMAL: 3180 μs + 120μs
Head Configuration
1/2-track, 1-channel erase head
1/4-track, 2-channel record/playback head
Motor FG servo controlled DC motor
Bias Frequency 100 kHz
Operation Position Horizontal
Power Requirements
100/117/220/240 V AC, 50/60 Hz, 29W, 25W for A-500MKII
(General Export Model)
117 V AC, 60 Hz, 27W, 23W for A-500MKII
(U.S.A./Canada Model)
220 V AC, 50 Hz, 28W, 24W for A-500MKII
(Europe Model)
240 V AC, 50 Hz, 28W, 24W for A-500MKII
(U.K./Australia Model)
Weight 9.5 kg (20-15/16 lbs.) net
Dimensions See Fig. 1-1.



Broken line indicates some General Export models.

Fig. 1-1

SERVICE DATA

MECHANICAL

Tape Speed Deviation 3,000 Hz ±45 Hz
Tape Speed Drift 45 Hz
Wow and Flutter
Playback: 0.07% (WRMS), 0.15% (RMS)
Record/Playback: 0.20% (RMS)
Pinch Roller Pressure 350 g to 450 g (12.3 oz. to 15.9 oz.)
Reel Torque
Take-up: 40 to 60 g.cm (0.6 to 0.8 oz-inch)
Supply: 2 to 6 g.cm (0.03 to 0.08 oz-inch)
Fast Forward: 80 to 150 g.cm (1.1 to 2.1 oz-inch)
Rewind: 100 to 150 g.cm (1.4 to 2.1 oz-inch)
Fast Winding Time
About 90 seconds for MTT-501 (C-60)

ELECTRICAL

Frequency Response
Playback $Co(CrO_2)$, METAL Reference 315 Hz:
40 Hz ~ 6.3 kHz ±2 dB
10 kHz +2, −3 dB
14 kHz +2, −4 dB
Overall Reference 400 Hz:
METAL/CO (CrO_2)
40 Hz +2, −4 dB
63 Hz ~ 10 kHz ±2 dB
14 kHz +2, −4 dB
NORMAL
40 Hz +2, −4 dB
63 Hz ~ 6.3 kHz ±2 dB
10 kHz +2, −3 dB
12.5 kHz +2, −4 dB
Signal-to-Noise Ratio
PLAYBACK: NORMAL; 48 dB min.
OVERALL: $Co(CrO_2)$ & METAL; 48 dB min.
NORMAL; 46 dB min.
S/N is improved by 5 dB at 1 kHz and 10 dB above 5 kHz when Dolby*2 NR is used.
Erase Efficiency 65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input level)
Channel Separation 30 dB min. at 1 kHz
Adjacent Track Crosstalk 40 dB min. at 125 Hz
Total Harmonic Distortion 2.0% or less at 400 Hz w/3 types of tape

- Improvements may result in SPECIFICATIONS AND SERVICE DATA changes
- Value of "dB" in the Data refers to 0 dB (0.775 V), except where specified.

*2 Noise reduction circuit made under license from Dolby Laboratories. The word "Dolby" and the Double-D symbol are trademarks of Dolby Laboratoreis.

CAUTION

⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components – refer to the TEAC Parts List and ensure exact replacement.

2 PARTS LOCATION

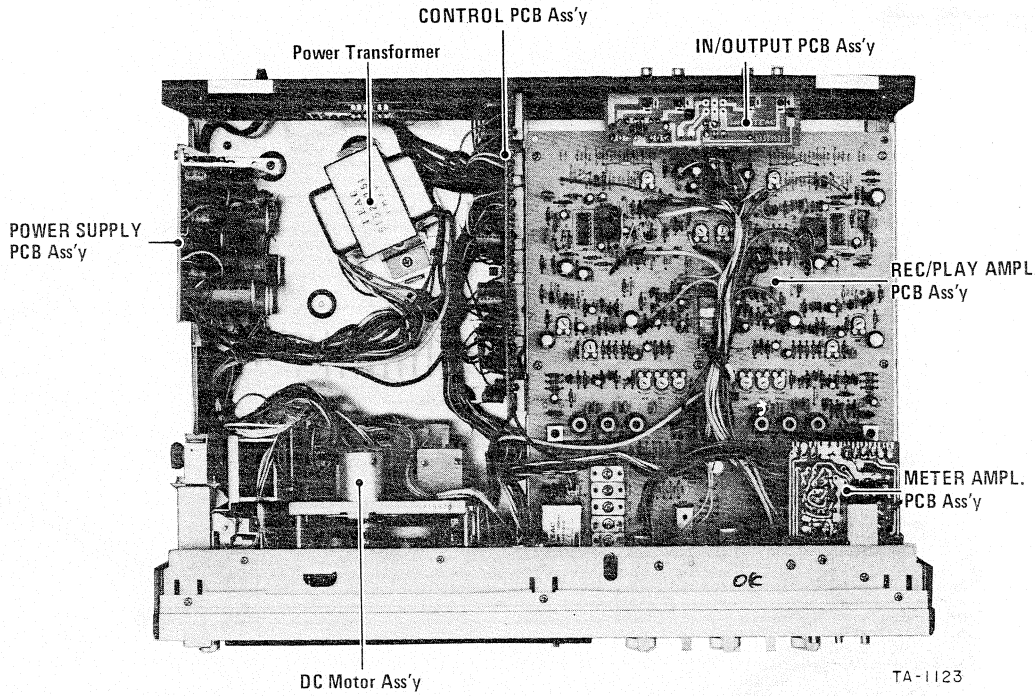


Fig. 2-1

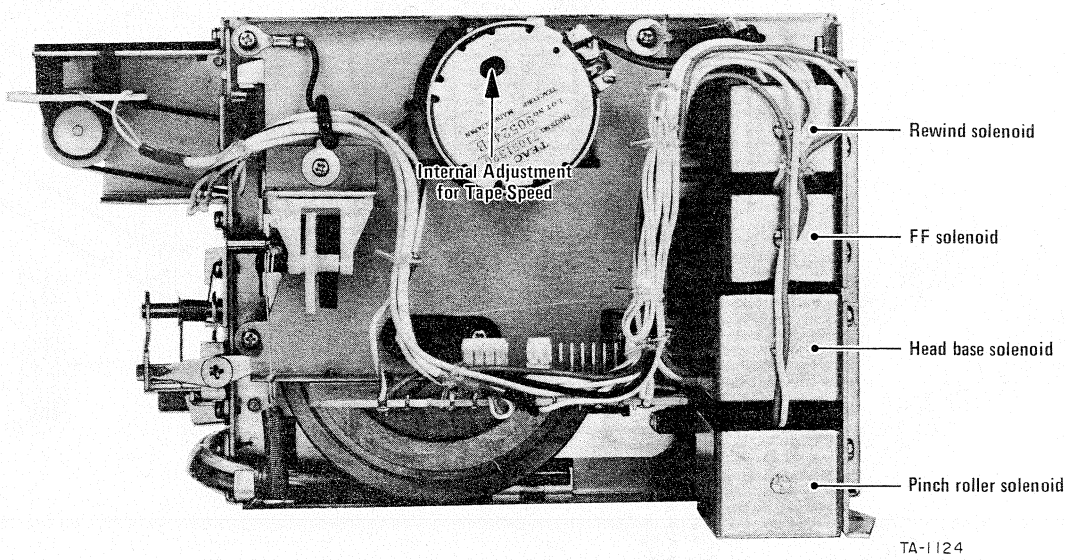


Fig. 2-2

3 CASE AND FRONT PANEL REMOVAL

Disassemble in number-order

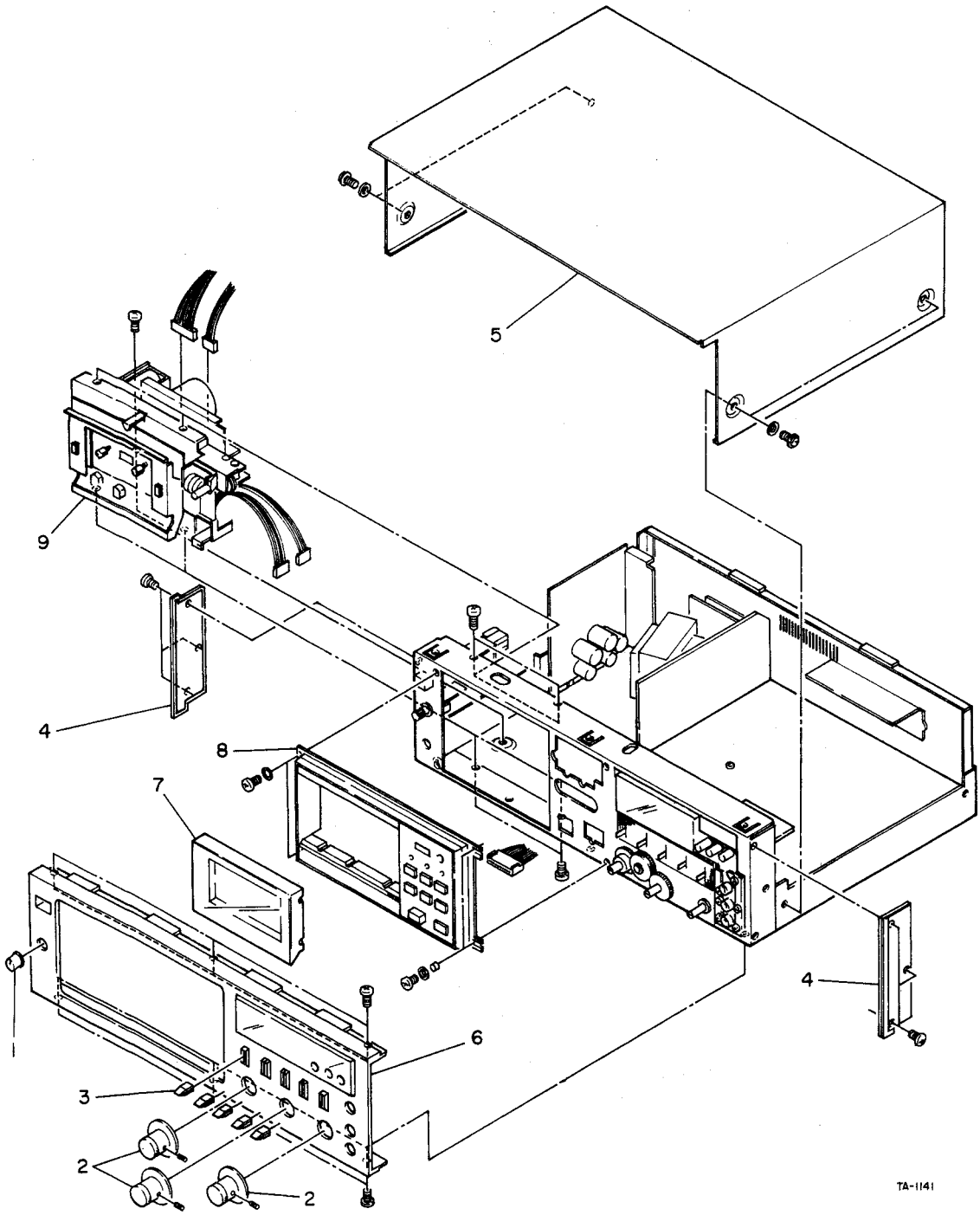


Fig. 3-1

4 MECHANICAL ADJUSTMENTS AND CHECKS

4-1 REEL TORQUE

Specifications:

Take-up:	40 to 60 g.cm (0.6 to 0.8 oz-inch)
Supply:	2 to 6 g.cm (0.03 to 0.08 oz-inch)
Fast Forward:	80 to 150 g.cm (1.1 to 2.1 oz-inch)
Rewind:	100 to 150 g.cm (1.4 to 2.1 oz-inch)

1. Load the cassette torque meter on the deck and read the pointer indication on the dial scale for each tape movement operation.

4-2 PINCH ROLLER PRESSURE

1. Place the deck in the PLAY mode with no tape loaded.
2. Attach the spring scale to the hole in the pinch roller ass'y as shown.
3. Draw the pinch roller away from the capstan shaft until the capstan shaft and the pinch roller are separated.
4. Return the scale back until the pinch roller just begins to rotate.
   The scale should then he reading as per spec.
   Specification: 350 g to 450 g (12.3 oz. to 15.9 oz.)

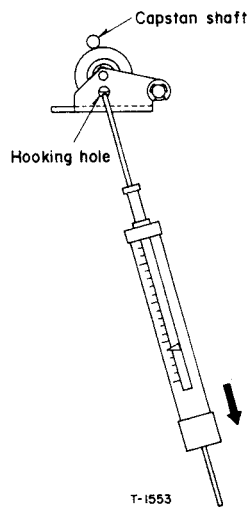


Fig. 4-1

4-3 CAPSTAN ASSEMBLY THRUST

Specification: 0.05 mm to 0.15 mm

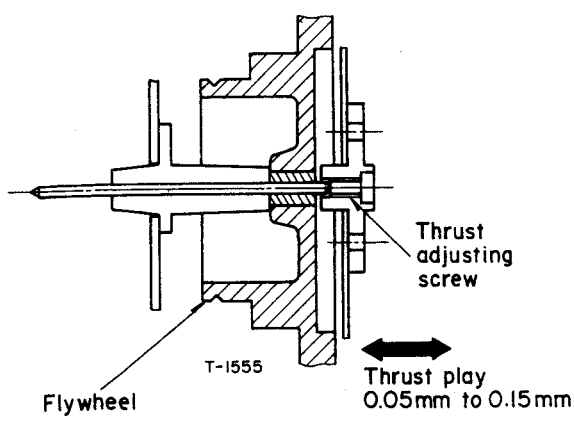


Fig. 4-2

4-4 HEAD BASE PLATE POSITIONNING

1. Set the deck in the PLAY mode.
2. Push the Head Base Plate in the direction of the arrow by hand to check whether there is any clearance between the Head Base Plate and the stopper portion of the mechanism chassis.
3. If there is any clearance, loosen the two screws on the head base plate solenoid and position the solenoid so that there is no clearance. See Fig. 2-2.

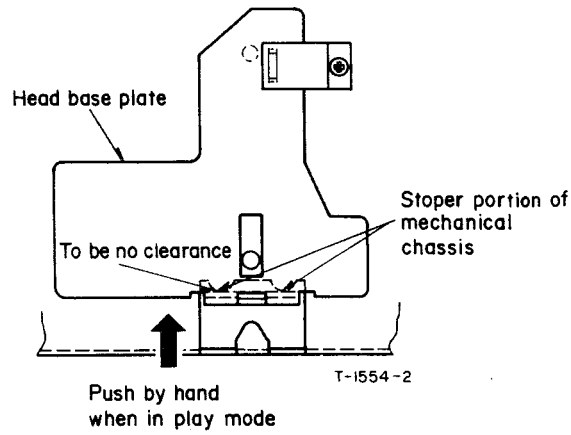


Fig. 4-3

4-5 MICRO SWITCH (A) ASSEMBLY CLEARANCE

1. Insert a blank cassette and close the cassette holder.
2. Loosen the two screws on the micro switch (A).
3. Move the switch so that actuator of the switch will contact the safety lever.
4. Adjust the switch position to get a clearance as shown.
5. Fasten the two screws.

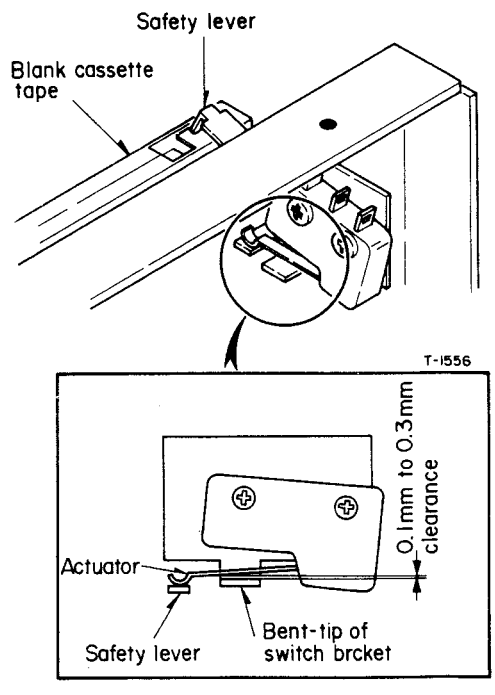


Fig. 4-4

4-6 MICRO SWITCH (B) ASSEMBLY CLEARANCE

1. Push the EJECT button to open the cassette holder.
2. Loosen the two screws on the micro switch (B).
3. Move the switch so that actuator of the switch contacts the bent-projecting portion of the eject lever.
4. Adjust the switch position to get a clearance as shown.
5. Fasten the two screws.

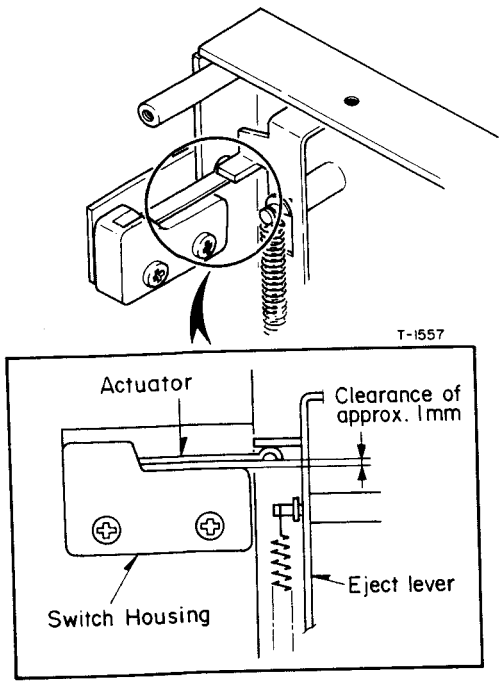


Fig. 4-5

4-7 TAPE SPEED

1. Load and play a TEAC MTT-111 test tape.
2. Using a common slotted screwdriver with a handle completely insulated from the screwdriver blade, adjust the control on the motor for a reading of 3,000 ±5 Hz. See Fig. 2-2.
3. Check the followings at the beginning and the end of the tape.
   Specifications:
   Tape speed deviation . . . . . 3,000 Hz ±45 Hz
   Tape speed drift . . . . . 45 Hz
4. If the tape speed is out of spec., check the pinch roller pressure and the tape driving function for correctness, and make sure the tape path is clean.

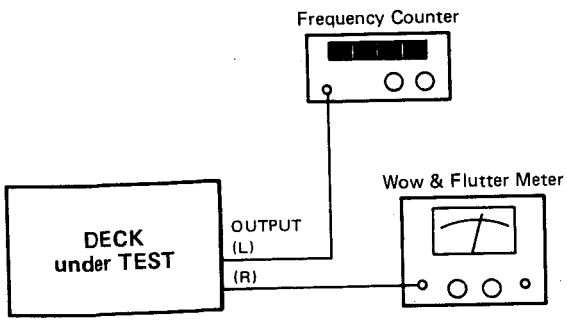


Fig. 4-6

4-8 LUBRICATION

Lubrication is only required when parts are replaced. For this purpose, use oil and grease specified below.

Oil: TEAC spindle oil (from TEAC TZ-255 oil kit), Mobil D.T.E. Oil Light, or equivalent

Grease: ORE-LUBE G1/3 or equivalent

1. Apply a drop of oil with an oil applicator to a point about 1/3 the way down the shaft (from the free end) of the flywheel, then insert the shaft into the capstan housing.
2. Apply a suitable amount of light grease to the well of the flywheel bearing.

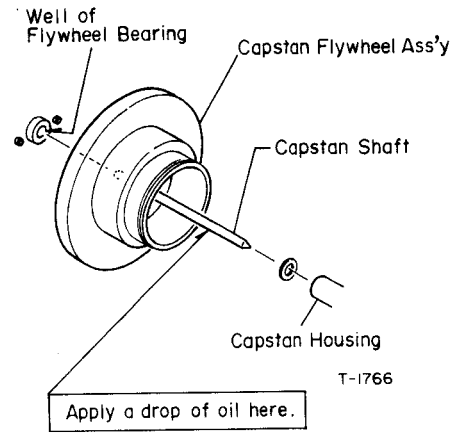


Fig. 4-7

4-9 VOLTAGE SELECTOR SETTING PROCEDURE (FOR GENERAL EXPORT MODELS)

1. Always disconnect the power line cord before making these adjustments.
2. Remove the top cover* of the deck by removing the screws from the sides.
3. Locate the voltage selector, shown in the illustration, to the front of the power transformer.
4. Loosen the two screws in the shorting bar and move the bar so that it shorts across the terminals marked with the required voltage (100, 117, 220 or 240).
5. Retighten the screws and replace the top cover*.

* Decks sold in some limited areas only have a wooden case which must be removed by the screws on the bottom of the deck before setting the voltage selector.

NOTE:
Since the deck employs a DC servo motor, 50 Hz or 60 Hz operation is permitted without power line frequency adaptation.

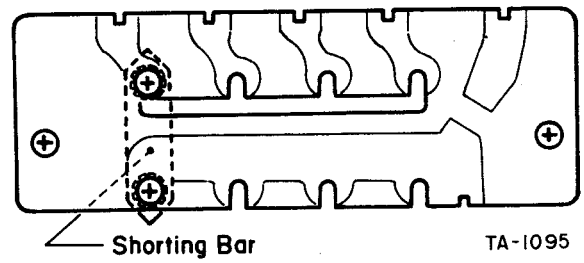


Fig. 4-8

5 ELECTRICAL ADJUSTMENTS AND CHECKS

PRECAUTIONS

1. Before performing adjustments and checks, clean and demagnetize the entire tape path.
2. Make sure the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks are done in the order of L-ch then R-ch. Double REF. Nos. indicate L-ch/R-ch. (Example: R11/R21)
4. The value of "dB" refers to 0 dB (0.775 V). If an AC voltmeter calibrated to 0 dB (1 V) is to be used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 M-ohms or more.
6. Note the "Deck settings" at the top of each chart. The settings must be used for all the checks or the chart unless explicitly stated otherwise.

5-1 POWER SUPPLY PCB ADJUSTMENT

1. Connect DC voltmeter as shown.
2. Adjust R815 for +23 V reading on the DC voltmeter.

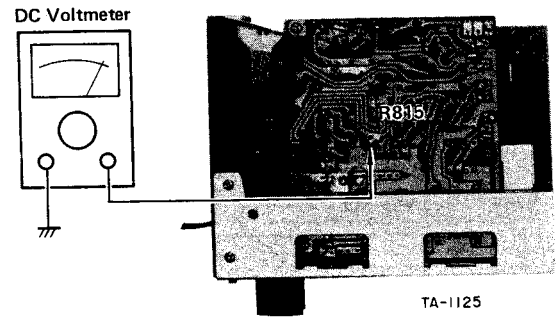


Fig. 5-1

5-2 BASIC TEST SETUP

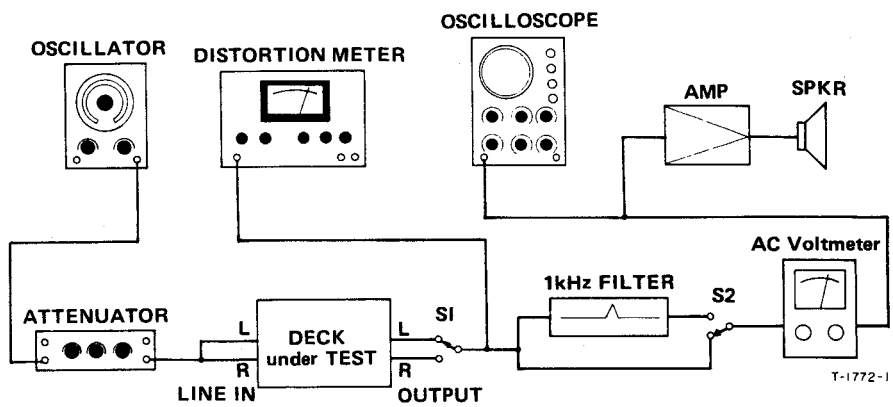


Fig. 5-2

–70 dB or more . . . What does it mean?

Values in dB are often given like this: "–70 dB or more". This sometimes leads to confusion. Is –76 dB more than –70 dB or less? To put the record straight, the "more" refers to the absolute value. The absolute value of –70 is 170I. The absolute value of –76 is 176I which is 6 more than 70.

So, –76 dB is "more" than –70 dB

–55 dB is "less" than –60 dB

5-3 PLAYBACK PERFORMANCE

Deck settings:
EQ sw. – METAL
DOLBY NR sw. – OUT

TEAC test tapes:
MTT-150: For Dolby level calibration
MTT-316: For playback frequency response check for METAL, Co (CrO_2).
MTT-216: For playback frequency response check for NORMAL

ITEM	CONNECTION	MODE/ INSTRUCTION	SIGNAL SOURCE	ADJUST (or CHECK)	OUTPUT	REMARKS
1. REC/PLAY head azimuth	Fig. 5-3	OUTPUT cont.—convenient level position	MTT-150	Check	Phase: within 45 on 'scope (Fig. 5-5)	
	"	"	MTT-316 (12.5 kHz/–20 dB)	Azimuth adj. nut of head (Fig.5-4)	Max. output on VTVM	
2. Output level	VTVM between TP1/TP2 and GND	OUTPUT cont.—convenient level position	MTT-150	R12/R22	580 mV(–2.5 dB)	
	Fig. 5-2	R13/R23 – Min. OUTPUT cont. – Max.	"	Check	–2.5 dB ±2 dB (461 mV ~ 731 mV)	Max. output level
	"	• Set OUTPUT cont. for –5 dB output of ch. with lower reading	"	OUTPUT cont.	–5 dB (436 mV)	• Spec. output level • **Spec. setting of OUTPUT cont.** **IMPORTANT: Do not move OUTPUT cont. during any later process.**
	"	• Adjust for ch. with higher reading	"	R13 or R23	"	
3. Peak level meter	Fig. 5-2	OUTPUT cont. – spec. setting	MTT-150	R15/R25	0 dB on peak level meter	
4. Frequency response	Fig. 5-2	EQ–METAL • Adjust for 10 kHz to be the same level as ref. signal	MTT-316	R11/R21	40 Hz ~ 6.3 kHz ±2 dB 10 kHz +2, –3 dB 14 kHz +2, –4 dB	Reference: 315 Hz
	"	EQ–NORMAL	" (10 kHz/ –20 dB)	Check	10 kHz output should be about 5 dB higher than in the step above.	
5. Signal-to-noise ratio	Fig. 5-2	EQ–NORMAL	Fully erased MTT-501 (Use bulk tape eraser)	Check	48 dB min. ratio	Ratio of spec. output –5 dB to noise
6. Headphone output level	Fig. 5-6	–	MTT-150	Check	–15 dB ±3 dB (97.5 mV ~ 195 mV)	• At phone jack • 8Ω load

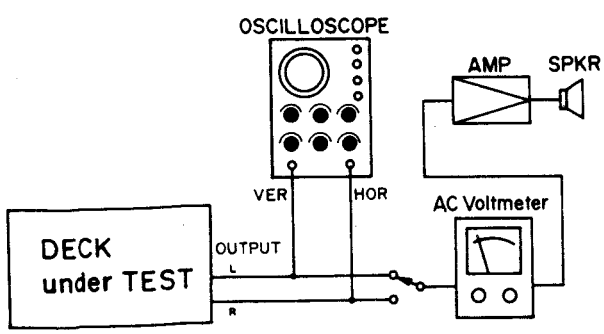


Fig. 5-3

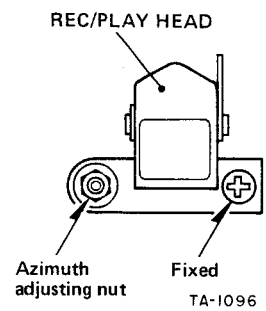


Fig. 5-4

5-4 MONITOR PERFORMANCE

Deck settings:
RECORD · PAUSE mode
DOLBY NR SW. – OUT
INPUT SW. – LINE
OUTPUT cont. – Spec. setting (Item 2)

ITEM	CONNECTION	MODE/ INSTRUCTION	SIGNAL SOURCE	ADJUST (or CHECK)	OUTPUT	REMARKS
7. LINE min. input level	Fig. 5-2	RECORD cont. – Max.	400Hz/–19dB ±3dB (61.5mV ~ 123 mV)	Check	–5 dB (436 mV)	
	"	↓ • If LINE input level difference between L and R is 2 dB or more, cut jumper (Fig. 5-7) on the lower reading ch.	"	"	"	By cutting, level can be raised 3 dB
8. LINE spec. input level	Fig. 5-2	–	400 Hz/–9 dB (275 mV)	RECORD cont.	–5 dB (436 mV)	• Spec. setting of RECORD cont. **IMPORTANT: Do not move RECORD cont. during any later process**
	OSC → ATT to LINE IN VTVM between TP1/TP2 and GND	–	"	Check	580 mV ±1 dB (518 mV ~ 652 mV)	
9. Peak level meter (A-500MKII)	Fig. 5-2	RECORD cont. – Spec. setting	400 Hz/–9 dB (275 mV)	Check	0 dB ±1 dB on peak level meter	
10. FL peak level meter (A-510 MKII)	Fig. 5-2	↓ PEAK HOLD – CANCEL	400 Hz/–9 dB (275 mV)	Check	0 dB ±1 dB on peak level meter	
	"	↓ PEAK HOLD – ON	"	"	–1 dB or more held on p. 1. meter	
11. MIC spec. input level	Fig. 5-2 But, LINE IN → MIC	↓ INPUT – MIC	400Hz/–57dB ±2 dB (0.869 mV ~ 1.38 mV)	Check	–5 dB (436 mV)	
12. DIN spec. input level	Fig. 5-2 But, LINE IN → DIN IN	↓ INPUT – MIC	400 Hz/–25dB ±2 dB (34.6 mV ~ 54.8 mV)	Check	–5 dB (436 mV)	Europe model only

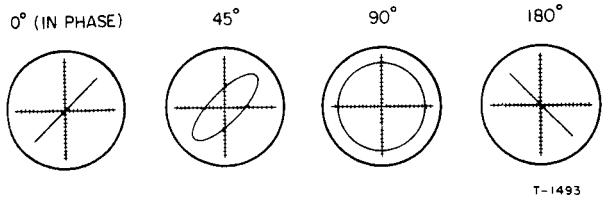


Fig. 5-5 Comfirming phase relationship

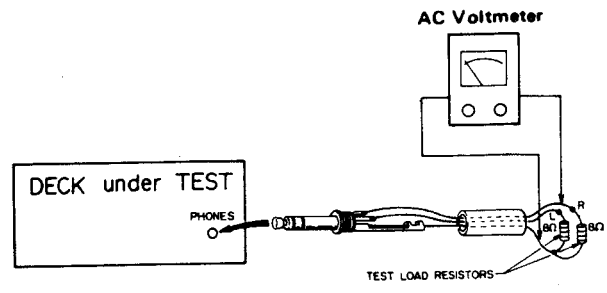


Fig. 5-6

Deck settings:

DOLBY NR SW. – OUT
INPUT SW. – LINE
OUTPUT cont. – spec. setting (Item 2)
RECORD cont. – spec. setting (Item 8)

TEAC test tapes:

MTT-506: For record test with Co (CrO_2)
MTT-501: For record test with NORMAL
METAL: For record test with METAL

5-5 RECORDING PERFORMANCE

ITEM	CONNECTION	MODE/ INSTRUCTION	SIGNAL SOURCE	ADJUST (or CHECK)	OUTPUT	REMARKS
13. Bias trap	VTVM between TP3/TP5 and GND	Record-pause mode	No signal record.	L104/L204	Min. reading	
14. Record bias	Fig. 5-2	METAL/METAL Co(CrO_2)/MTT-506 NORMAL/MTT-501	400 Hz & 12.5 kHz for METAL (or 10 kHz for Co(CrO_2), NORMAL) alternately /–42 dB (6.15 mV)	VC101/VC201 VC102/VC202 VC103/VC203	Equal level at both freq.	
15. Record level	Fig. 5-2	METAL/METAL Co(CrO_2)/MTT-506 NORMAL/MTT-501	400 Hz/–12 dB (195 mV)	R18/R28 R17/R27 R16/R26	–8 dB (308 mV)	
16. Frequency response	Fig. 5-2	METAL/METAL Co(CrO_2)/MTT-506	Required signal/ –42dB (6.15 mV)	Check	40 Hz +2, –4 dB 63 Hz ~ 10 kHz ±2 dB 14 kHz +2, –4 dB	Ref. 400 Hz
	,,	NORMAL/MTT-501	,,	,,	40 Hz +2, –4 dB 63 Hz ~ 6.3 kHz ±2 dB 10 kHz +2, –3 dB 12.5 kHz +2, –4 dB	
17. Signal-to-noise ratio	Fig. 5-2	METAL/METAL Co (CrO_2)/MTT-506 NORMAL/MTT-501 ···	1 kHz/–9 dB (275 mV) then no signal record.	Check	48 dB min. ratio ··· 46 dB min. ratio	Ratio of spec. output –5 dB to noise
18. Total harmonic distortion	Fig. 5-2	METAL/METAL Co(CrO_2)MTT-506 NORMAL/MTT-501	400 Hz/–12dB (195 mV)	Check	2% or less dist.	
19. Erase efficiency	Fig. 5-2 Switch on 1 kHz filter	• Record 1 kHz. Rewind tape to mid point of recorded portion. Do no signal recording. Get difference between 1 kHz portion and its erased portion.				
		METAL/METAL (or Co(CrO_2)/MTT-506)	1 kHz/+1dB (0.869 V) then no signal record	Check	65 dB min. ratio	• Ref. output level: +5 dB (1.38 V) • The worst value should be within spec.
20. REC MUTE function	Fig. 5-2 Switch on 1 kHz filter	• Record 1 kHz. Then push REC MUTE button for several sec. Rewind and play tape. Get difference between 1 kHz portion and the created no signal portion.				
		METAL/METAL (or Co(CrO_2)/MTT-506)	1 kHz/+1 dB (0.869 V) then no signal record	Check	65 dB min. ratio	Same as above
21. Channel separation	Fig. 5-2 But use LINE IN (L) only as input, switch on 1kHz filter	• Set deck in record mode. Find differences between 1 kHz recorded portion (L-ch) and no signal portion (R-ch).				
		METAL/METAL (or Co(CrO_2)/MTT-506)	1 kHz/–9 dB (275 mV)	Check	30 dB min. ratio	
22. Adjacent track crosstalk	Fig. 5-2 But use LINE IN (R) only as input, and OUTPUT (R) only as output	• Record 125 Hz on R-ch. Note output level of its recorded portion. Invert tape and play R-ch track. Check leakage level against the output reference of previously recorded portion.				
		METAL/METAL (or Co(CrO_2)/MTT-506)	125 Hz/–9 dB (275 mV)	Check	40 dB min. ratio	
23. Dolby NR effect	Fig. 5-2	• Record 1 kHz with DOLBY NR switch in OUT. Play its portion with switch in OUT, IN and MPX/IN respectively. Get the output level difference between OUT and IN (also MPX/IN). • Repeat the above process for 10 kHz.				
		METAL/METAL (or Co(CrO_2)/MTT-506)	1 kHz/–29 dB (27.5 mV)	Check	Variation, 5.5 dB ±2.5 dB	
		,,	10 kHz/–39 dB (8.69 mV)	,,	,, , 10 dB ±2 dB	

5-6 ADJUSTMENT AND TEST POINT LOCATIONS

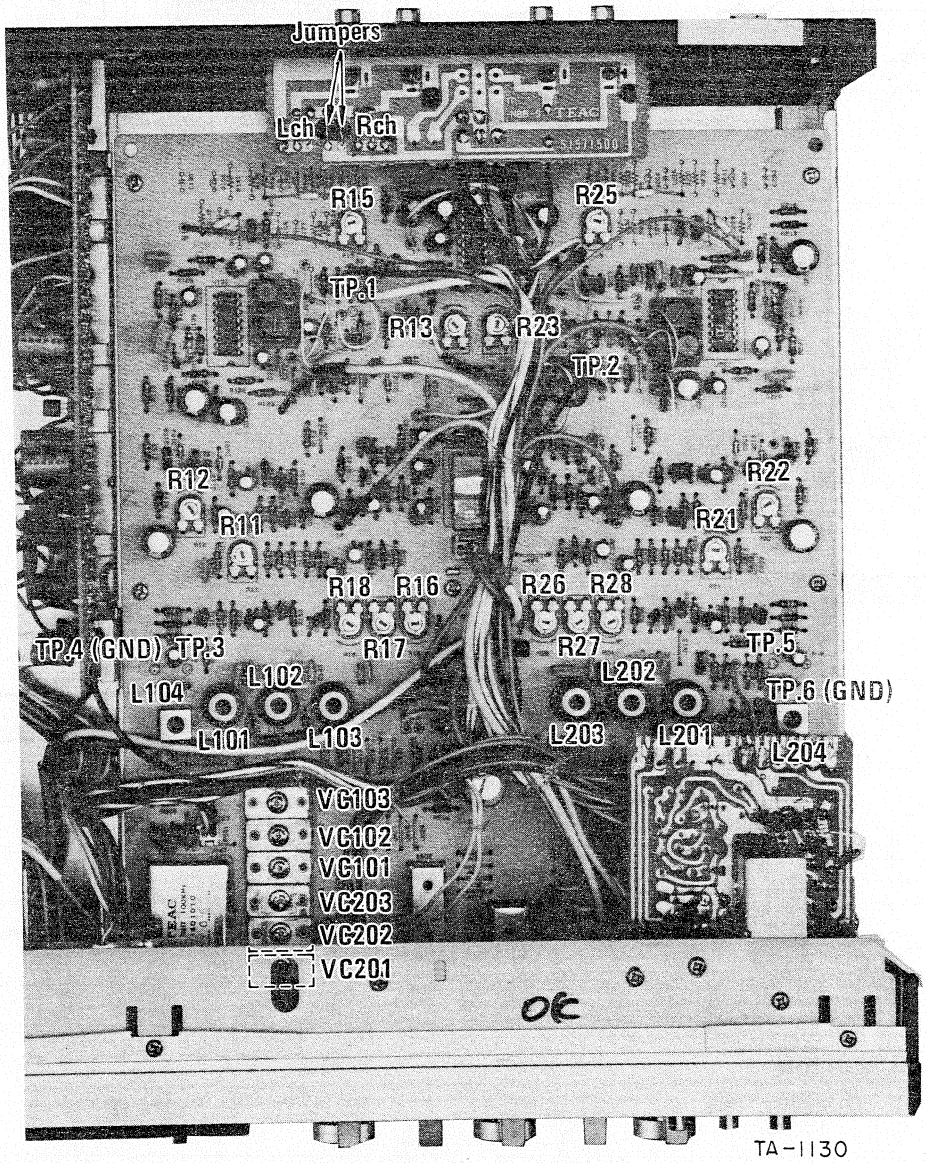
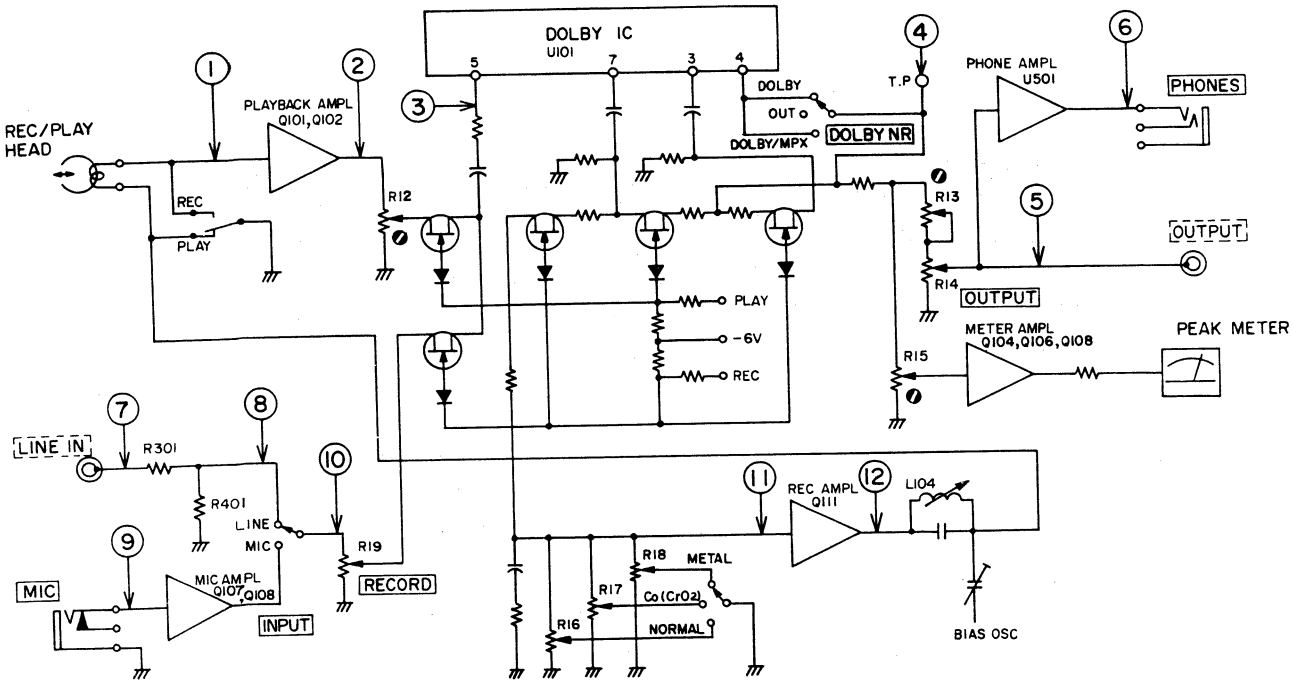
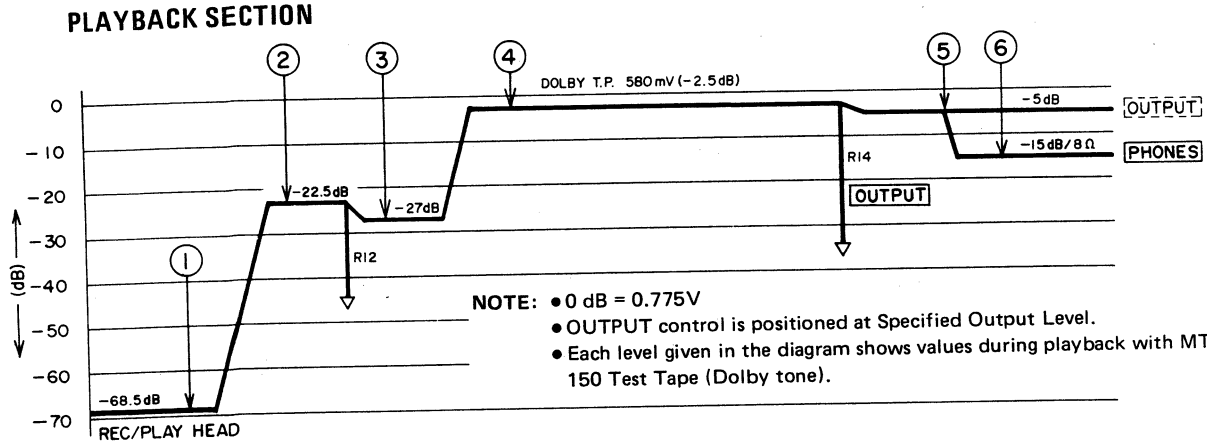


Fig. 5-7

5-7 LEVEL DIAGRAM

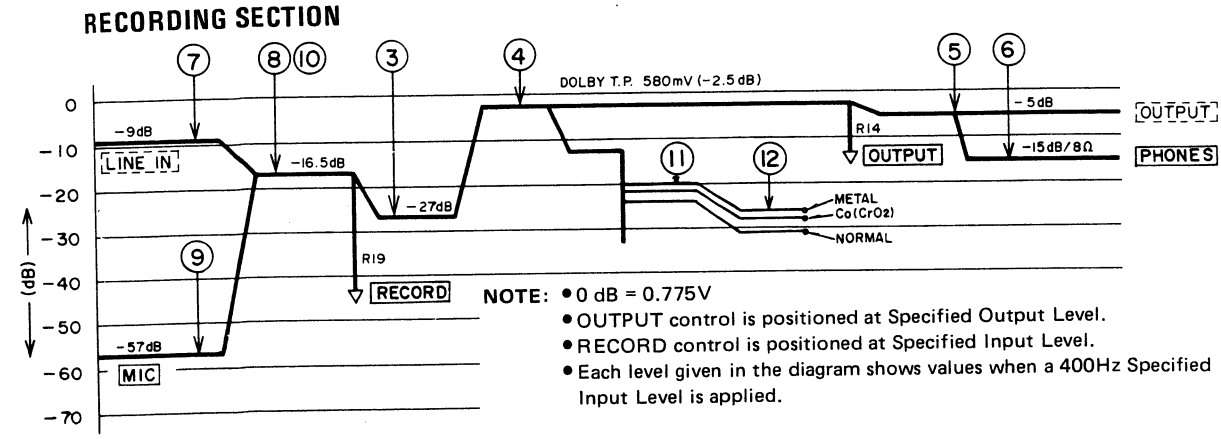


PLAYBACK SECTION



NOTE:
- 0 dB = 0.775V
- OUTPUT control is positioned at Specified Output Level.
- Each level given in the diagram shows values during playback with MTT-150 Test Tape (Dolby tone).

RECORDING SECTION



NOTE:
- 0 dB = 0.775V
- OUTPUT control is positioned at Specified Output Level.
- RECORD control is positioned at Specified Input Level.
- Each level given in the diagram shows values when a 400Hz Specified Input Level is applied.

TA-1142

Fig. 5-8

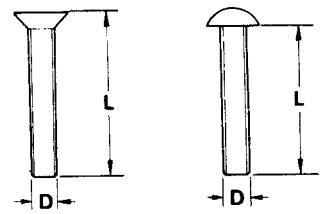
ASSEMBLING HARDWARE CODING LIST

All screws conform to ISO standards, and have crossrecessed heads, unless otherwise noted.
ISO screws have the head inscribed with a point as in the figure to the right.

FOR EXAMPLE:

B M 3 x 6

- Length in mm (L)
- Diameter in mm (D) *
- Metric System
- Nomenclature



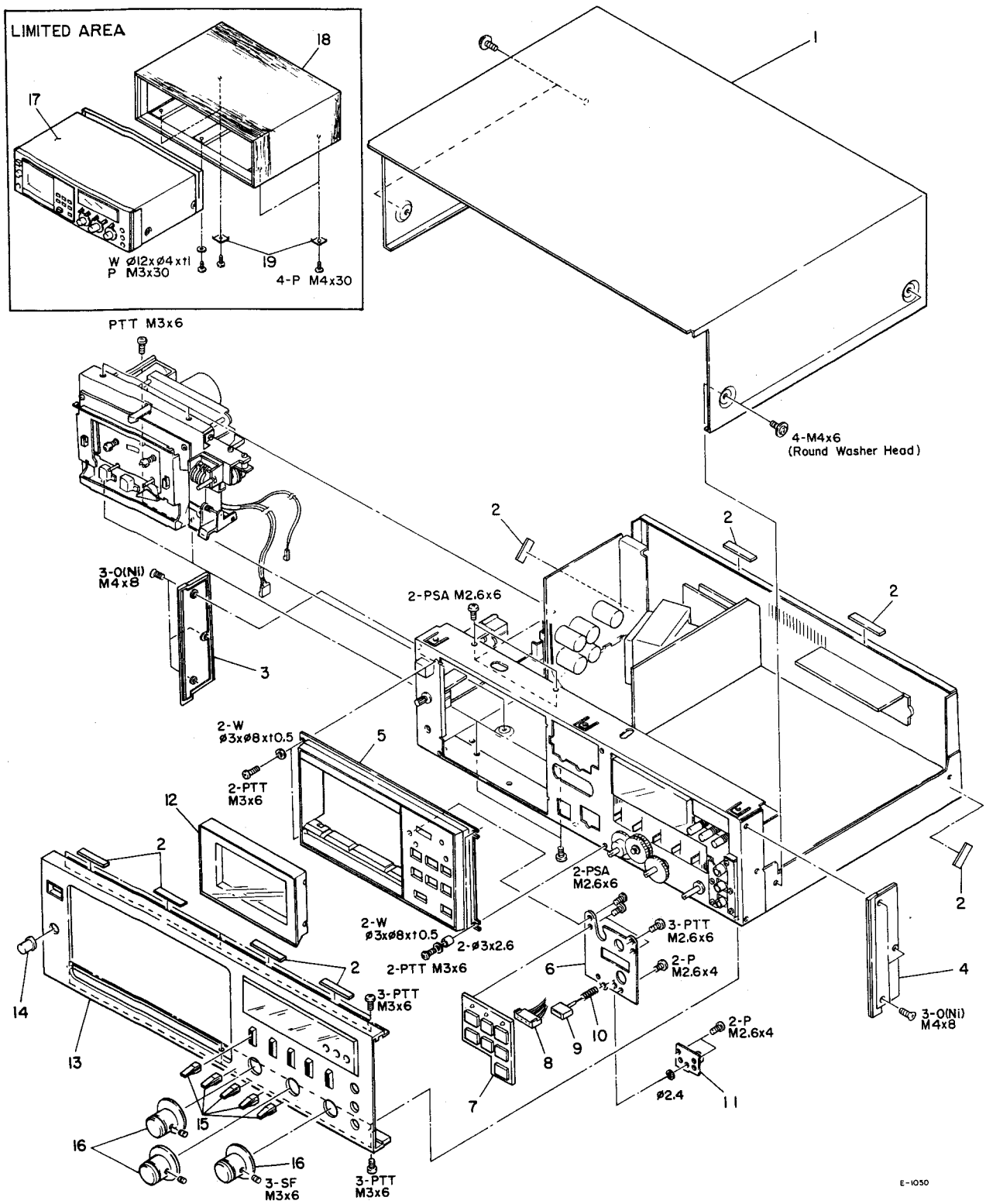
* Inner dia. for washers and nuts

	Code	Name	Type
MACHINE SCREW	R	Round Head Screw	
	P	Pan Head Screw	
	T	Stove Head Screw (Truss)	
	B	Binding Head Screw	
	F	Flat Countersunk Head Screw	
	O	Oval Countersunk Head Screw	
WOOD SCREW	RW	Round Head Wood Screw	
TAPTITE SCREW	PTT	Pan Head Taptite Screw	
	WTT	Washer Head Taptite Screw	
SEMS SCREW	BSA	Binding Head SEMS Screw(A Type)	
	BSB	Binding Head SEMS Screw(B Type)	
	BSF	Binding Head SEMS Screw(F Type)	
	PSA	Pan Head SEMS Screw(A Type)	
	PSB	Pan Head SEMS Screw(B Type)	

	Code	Name	Type
TAPPING SCREW	BTA	Binding Head Tapping Screw(A Type)	
	BTB	Binding Head Tapping Screw(B Type)	
	RTA	Round Head Tapping Screw(A Type)	
	RTB	Round Head Tapping Screw(B Type)	
SETSCREW	SF	Hex Socket Setscrew(Flat Point)	
	SC	Hex Socket Setscrew(Cup Point)	
	SS	Slotted Socket Setscrew(Flat Point)	
WASHER	E	E-Ring (Retaining Washer)	
	W	Flat Washer (Plain)	
	SW	Lock Washer (Spring)	
	LWI	Lock Washer (Internal Teeth)	
	LWE	Lock Washer (External Teeth)	
	TW	Trim Washer (Countersunk)	
NUT	N	Hex Nut	

6 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW - 1



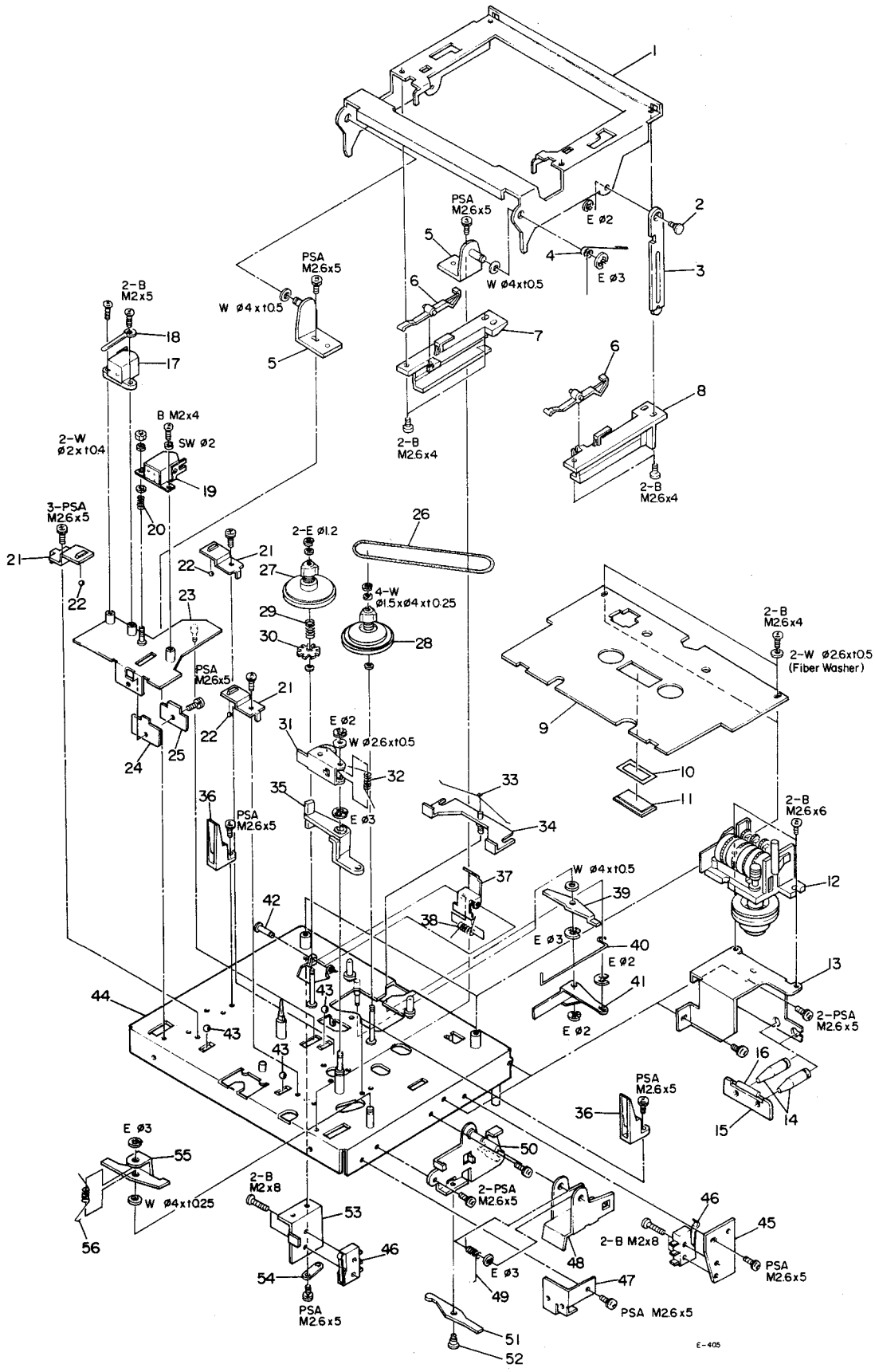
Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1 - 1	*5551032100	Cover, Top	
1 - 2	*5555570000	Cushion, Top Cover; B	
1 - 3	*5533172000	Sash, Side; B	
1 - 4	*5533171000	Sash, Side; A	
1 - 5	*5531034001	Escuthceon, Cassette	
1 - 6	*5555650000	Plate, Switch Pressure	
1 - 7	*5138009000	Key Unit	
1 - 8	*5122174000	Connector, Socket; 12P	
1 - 9	*5533183002	Button, Eject	
1 - 10	*5524206000	Spring, Switch	
1 - 11	*5534717000	Holder, Button	
1 - 12	*5503187100	Cover Assy, Cassette	
1 - 13	*5502275000	Panel Assy, Front; E (f-510MKII)	JAPAN
	*5502276000	Panel Assy, Front; F (A-510MKII)	All except JAPAN
	*5502273000	Panel Assy, Front; C (f-500MKII)	JAPAN
	*5502274000	Panel Assy, Front; D (A-500MKII)	All except JAPAN
1 - 14	*5504712000	Knob Assy, TIMER	
1 - 15	*5533120000	Knob, Lever Switch	
1 - 16	*5503190000	Knob Assy, C	
1 - 17	*5552383000	Cover, Shield	LIMITED AREA
1 - 18	*5800022900	Case Assy, Wooden	LIMITED AREA
1 - 19	*5555526000	Washer	LIMITED AREA

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	5128065000	Cord, Input-output Connection	
	5101369000	Information Supplement, Cassette	JAPAN
	5101345000	Information Supplement, Cassette	U.S.A.
	5101495000	Information Supplement, Cassette	All except JAPAN, U.S.A.
	5101727000	f-510 MKII/f-500MKII Owner's Manual	JAPAN
	5101728000	A-510MKII/A-500MKII Owner's Manual	U.S.A.
	5101729000	A-510MKII/A-500MKII Owner's Manual	All except JAPAN, U.S.A.

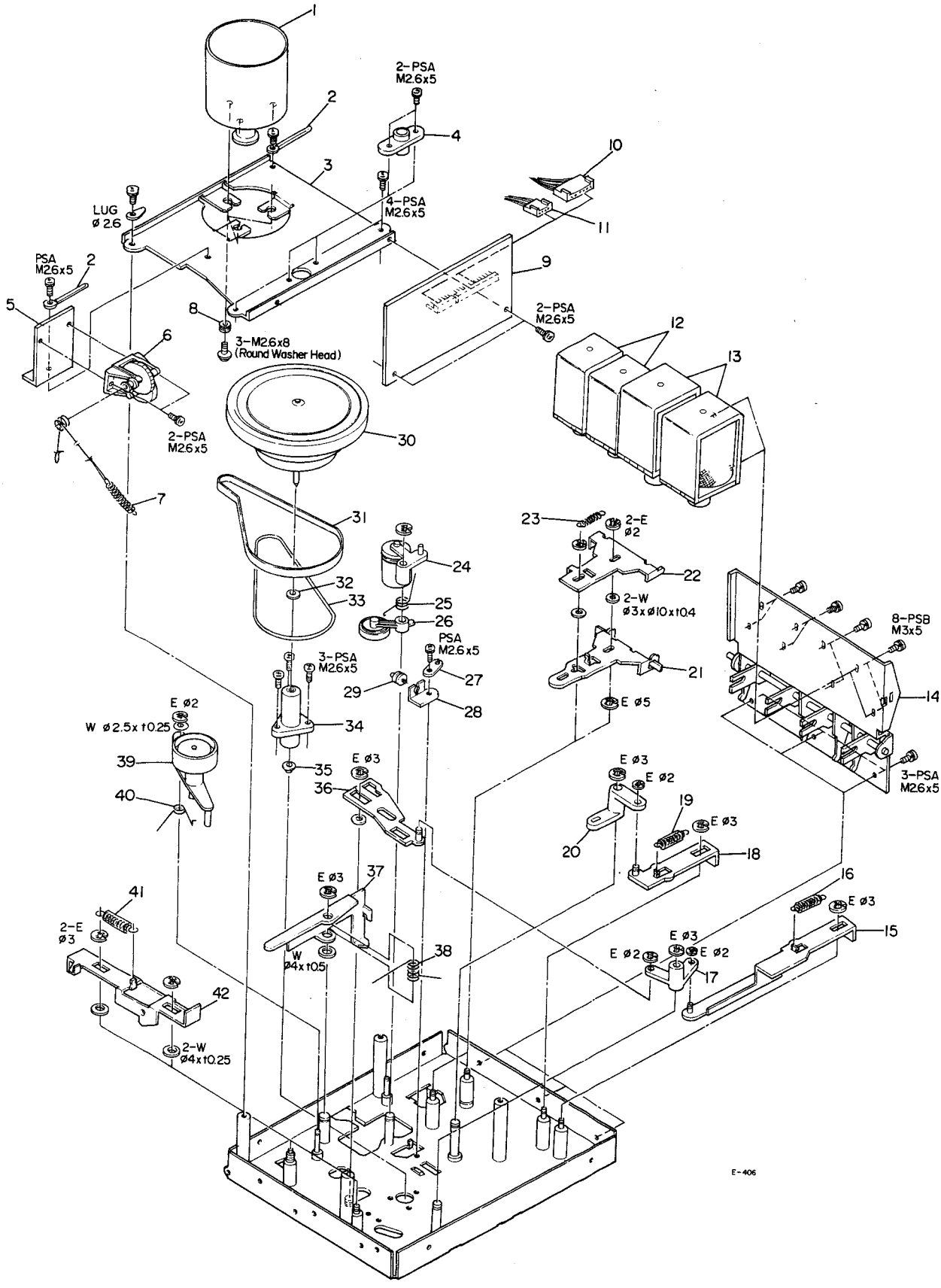
EXPLODED VIEW - 2



Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	*5553267100	Holder, Cassette	
2 - 2	*5544958000	Shaft, Lock Plate	
2 - 3	*5534612000	Plate, Lock	
2 - 4	*5524202000	Spring, Holder	
2 - 5	*5534615100	Lever, Cassette Pressure	
2 - 6	5534615000	Spring, Cassette Pressure	
2 - 7	5534614000	Guide, Cassette; R	
2 - 8	5534613000	Guide, Cassette; L	
2 - 9	*5555554000	Plate, Cassette Holder	
2 - 10	*5555088000	Tape, Adhesive	
2 - 11	*5534443000	Lens, Lamp	
2 - 12	5504660001	Counter Assy	
2 - 13	*5555535000	Bracket, Counter Assy	
2 - 14	*5534448000	Cushion, Rubber	
2 - 15	*5168549000	PCB Assy, REED SWITCH	
	5167549000	PCB, REED SWITCH	Part of 2 - 15
2 - 16	*5138006000	Switch, Reed	Part of 2 - 15
2 - 17	5569613000	Head, Erase	
2 - 18	*5581062000	Clamper, Cord; E	
2 - 19	5569616000	Head, REC/PLAY	
2 - 20	5520002100	Spring, REC/PLAY Head	
2 - 21	*5555533000	Pressure Plate, Head Base Plate	
2 - 22	*5540055000	Steel Ball, ϕ2	
2 - 23	*5504656000	Plate Assy, Head Base	
2 - 24	*5555530000	Plate, Head Base; A	
2 - 25	*5555531000	Plate, Head Base; B	
2 - 26	5534617000	Belt, Counter	
2 - 27	5504465000	Reel Table Assy, Supply	
2 - 28	5504464000	Reel Table Assy, Take-up	
2 - 29	*5800025300	Spring, Friction Plate	
2 - 30	*5534304000	Plate, Friction	
2 - 31	5504828001	Arm Assy, Pinch Roller	
2 - 32	*5524193000	Spring, Pinch Roller	
2 - 33	*5520333000	Spring, Brake	
2 - 34	*5504669001	Plate Assy, Brake	
2 - 35	*5534606000	Arm Assy, Pinch Roller Actuating	
2 - 36	*5534444200	Guide, Cassette	
2 - 37	*5555544000	Lever, Safety; D	
2 - 38	*5524197000	Spring, Safety Lever	
2 - 39	*5555546000	Arm, Pressure; B	
2 - 40	*5524196000	Rod, Brake Actuating; A	
2 - 41	*5555541000	Arm, Brake Actuating	
2 - 42	*5544656000	Shaft, Safety Lever	
2 - 43	*5540056000	Steel Ball, ϕ3	
2 - 44	*5502206100	Chassis, Mechanism	
2 - 45	*5555548000	Bracket, Switch; B	
2 - 46	5130003000	Switch, Micro	
2 - 47	*5555556000	Angle, Spring	
2 - 48	*5555551000	Arm, Eject	
2 - 49	*5524201000	Spring, Eject Arm	
2 - 50	*5504671000	Holder Assy, Switch	
2 - 51	*5555552000	Arm, Eject	
2 - 52	*5581055000	Screw, Shoulder; D	
2 - 53	*5555543000	Bracket, Switch; A	
2 - 54	*5555197000	Clamper, Cord	
2 - 55	*5555549000	Arm, Eject Preventing	
2 - 56	*5524200000	Spring, Preventing Arm	

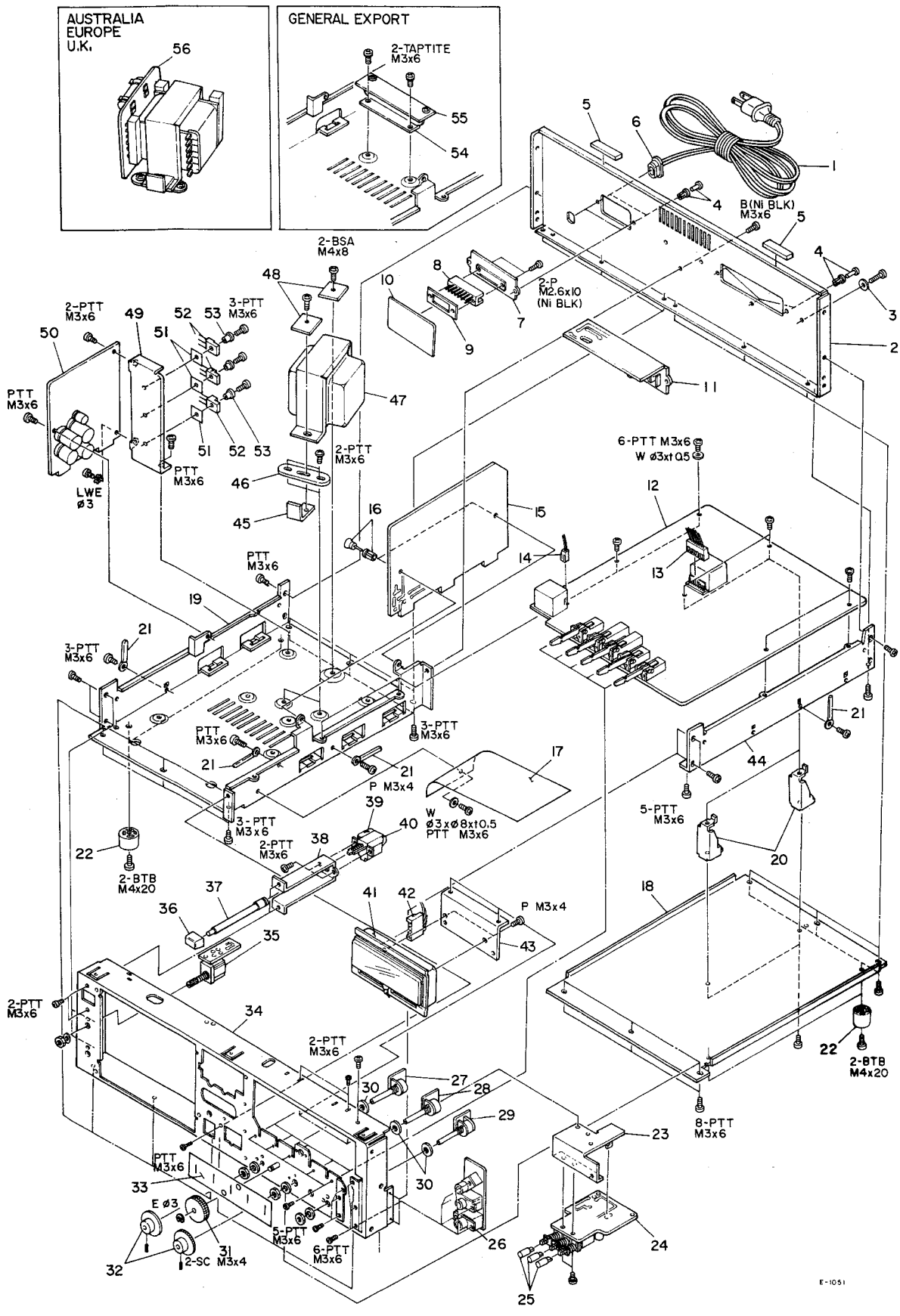
EXPLODED VIEW - 3



Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	7105132000	Motor Assy, DC	
3 - 2	*5581038000	Clamper, Cord; A	
3 - 3	*5555534000	Plate, DC Motor	
3 - 4	*5534277000	Bearing, Flywheel	
3 - 5	*5555555000	Bracket, Damper	
3 - 6	*5504673000	Holder Assy, Damper; C	
3 - 7	*5524203000	Spring, Damper	
3 - 8	*5534537000	Cushion, Rubber	
3 - 9	*5168802100	PCB Assy, JOINT	
3 - 10	*5122174000	Connector, Socket; 12P	
3 - 11	*5122167000	Connector, Socket; 5P	
3 - 12	5163040000	Solenoid, B	
3 - 13	5163039100	Solenoid, A	
3 - 14	*5503182000	Bracket Assy, Solenoid	
3 - 15	*5504666000	Lever Assy, Pause Actuating	
3 - 16	*5524195000	Spring, Pause Actuating	
3 - 17	*5534611000	Arm, Pause Actuating	
3 - 18	*5504665000	Lever Assy, Actuating	
3 - 19	*5524213000	Spring, Actuating; A	
3 - 20	*5534610000	Arm, Head Base Plate Actuating	
3 - 21	*5504668000	Lever Assy, FF; A	
3 - 22	*5555540000	Plate, Brake Actuating; B	
3 - 23	*5520332000	Spring, Lever; B	
3 - 24	5504662000	Arm Assy, FF; C	
3 - 25	*5524194000	Spring, FF Arm; B	
3 - 26	5504663000	Arm Assy, FF; D	
3 - 27	*5555197000	Clamper, Cord	
3 - 28	*5555542000	Bracket, Lamp; A	
3 - 29	5142089000	Lamp	
3 - 30	5504659000	Flywheel Assy, Capstan	
3 - 31	5534446000	Belt, Capstan Drive	
3 - 32	*5550031000	Washer, Thrust	
3 - 33	5534416000	Belt, Fast Wind	
3 - 34	5504091000	Housing Assy, Capstan	
3 - 35	*5534130000	Washer, Oil Retaining	
3 - 36	*5504667000	Lever Assy, Pause	
3 - 37	*5555545000	Ram, Pressure; A	
3 - 38	*5524198000	Spring, Pressure Arm	
3 - 39	5504466100	Pulley Assy, Tension	
3 - 40	5520330000	Spring, Tension	
3 - 41	*5524199000	Spring, Eject	
3 - 42	*5504670000	Lever Assy, Eject	

EXPLODED VIEW - 4 (A-510MKII, f-510MKII)

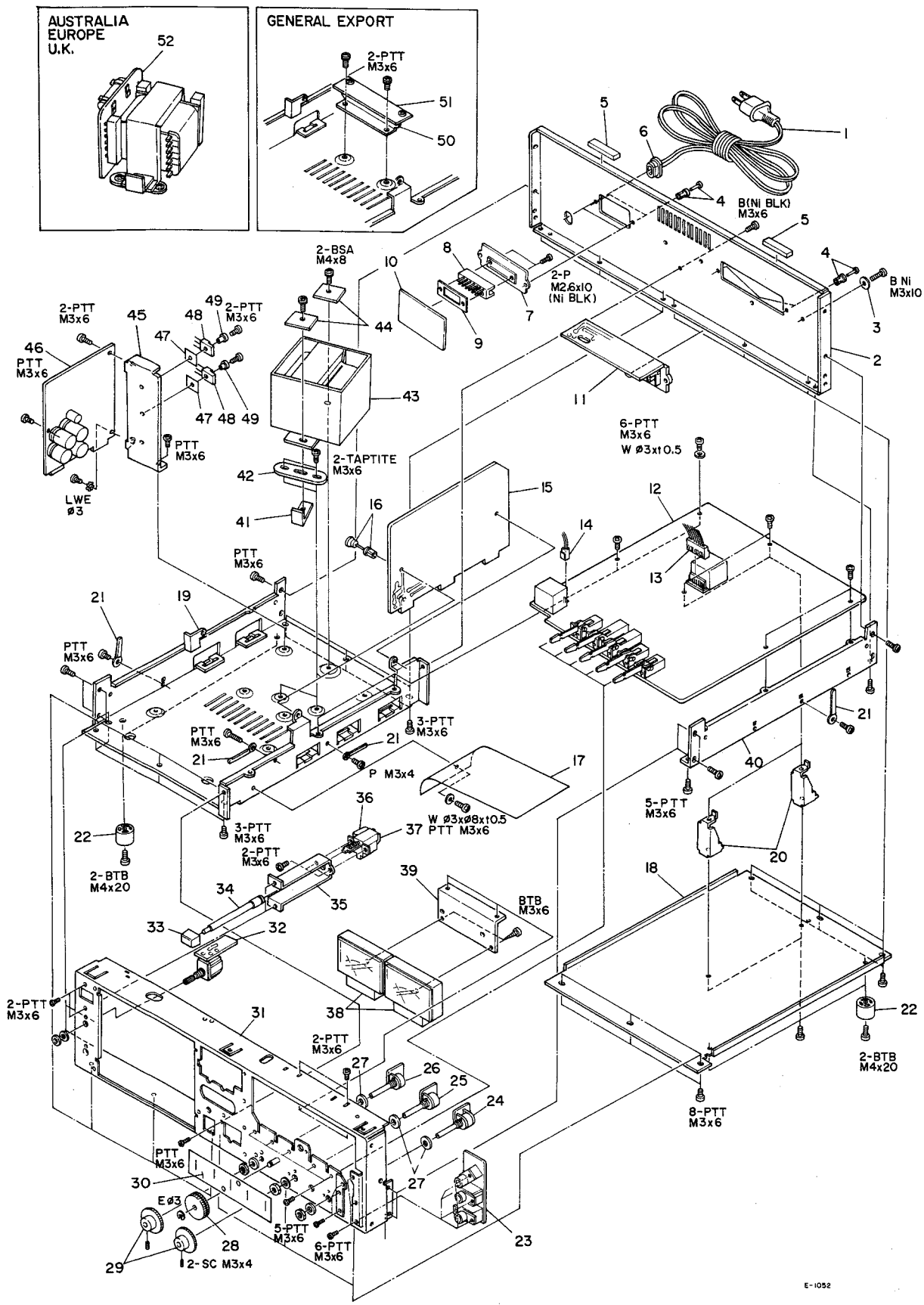


Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 1	⚠*5128034000	Cord, AC Power	JAPAN, GENERAL EXPORT
	⚠*5128075000	Cord, AC Power	U.S.A., CANADA
	⚠*5128017000	Cord, AC Power	EUROPE
	⚠*5128036000	Cord, AC Power	U.K.
	⚠*5128031000	Cord, AC Power	AUSTRALIA
4 - 2	*5552339000	Panel, Rear	
4 - 3	*5555063000	Washer, GND	
4 - 4	*5534118000	Push Rivet	
4 - 5	*5555570000	Cushion, Top Cover; B	
4 - 6	*5534660000	Strain Relief, AC Power Cord	All except U.K., AUSTRALIA
	*5534661000	Strain Relief, AC Power Cord	U.K.
	*5534663000	Strain Relief, AC Power Cord	AUSTRALIA
4 - 7	*5534624000	Escutcheon, Remote	
4 - 8	*5122336000	Connector, Socket; 12P	
4 - 9	*5555566000	Plate, Connector	
4 - 10	*5168801000	PCB Assy, REMOTE CONTROL	
	*5167801000	PCB, REMOTE CONTROL	Part of 4 - 10
	*5181484000	Carbon Res., 1.2 k ohm ¼W 5%	Part of 4 - 10
4 - 11	*5158151000	PCB Assy, IN/OUTPUT (2)	All except EUROPE
	*5158150000	PCB Assy, IN/OUTPUT (1)	EUROPE
	*5157150000	PCB, IN/OUTPUT	Part of 4 - 11
	5181526000	Carbon Res. 68 k ohm ¼W 5%	R301, R302 Part of 4 - 11
	5181534000	Carbon Res. 150 k ohm ¼W 5%	R303, R304 Part of 4 - 11
	*5126039000	Terminal Assy	All except EUROPE
	*5126030100	Terminal Assy (with DIN)	EUROPE
4 - 12	*5158154002	PCB Assy, REC/PLAY AMPL. (3)	
4 - 13	*5122168000	Connector, Socket; 6P	
4 - 14	*5122164000	Connector, Socket; 2P	
4 - 15	*5158161000	PCB Assy, CONTROL	
4 - 16	*5534473000	Rivet, T-type	
4 - 17	*5555563000	Paper, Shield	
4 - 18	*5552340100	Chassis, Bottom	
4 - 19	*5551031200	Chassis, Side	
4 - 20	*5555565200	Bracket, PCB	
4 - 21	*5581038000	Clamper, Cord; A	
4 - 22	*5504676000	Foot	
4 - 23	*5555568100	Bracket, Switch	
4 - 24	*5200001300	PCB Assy, METER AMPL.	
4 - 25	*5504681000	Knob Assy, Push Switch	
4 - 26	*5158152001	PCB Assy, JACK; 105	All except EUROPE
	*5157152001	PCB, JACK; 105	Part of 4 - 26
	*5158090001	PCB Assy, JACK; 104	EUROPE
	*5157090000	PCB, JACK; 104	Part of 4 - 26
	*5124028100	Jack, MIC; L	Part of 4 - 26 (EUROPE)
	*5124023000	Jack, MIC; R	Part of 4 - 26 (All except EUROPE)
4 - 27	*5158089000	PCB Assy, OUTPUT VAR. RES.	
	*5157089000	PCB, Input VAR. RES.	Part of 4 - 27
	5150255000	Var. Res., 20 k ohm - A x 2	Part of 4 - 27
4 - 28	*5158157000	PCB Assy, INPUT VAR. RES. (2)	
	*5157157000	PCB, Input VAR. RES.; 120	Part of 4 - 28
	5150228000	Var. Res., 100 k ohm - A	Part of 4 - 28
4 - 29	*5158156000	PCB Assy, INPUT VAR. RES. (1)	
	*5157156000	PCB, Input VAR. RES.; 119	Part of 4 - 29
	5150228000	Var. Res., 100 k ohm - A	Part of 4 - 29
4 - 30	*5555884000	Washer	
4 - 31	*5504678000	Gear Assy, Friction	
4 - 32	*5504677000	Gear Assy, A	
4 - 33	*5555885000	Mask, Switch	
4 - 34	*5503233000	Chassis, Front	
4 - 35	*5158163000	PCB Assy, TIMER	
	*5210000100	PCB, TIMER	Part of 4 - 35
	5133019000	Switch, Rotary; DP3T	Part of 4 - 35
4 - 36	*5534431000	Button, B	
4 - 37	*5534221000	Rod, Power Switch	
4 - 38	*5555561000	Bracket, Power Switch	

(Continued on page 32)

EXPLODED VIEW - 5 (A-500MKII, f-500MKII)



Parts marked with *require longer delivery time than regular parts.

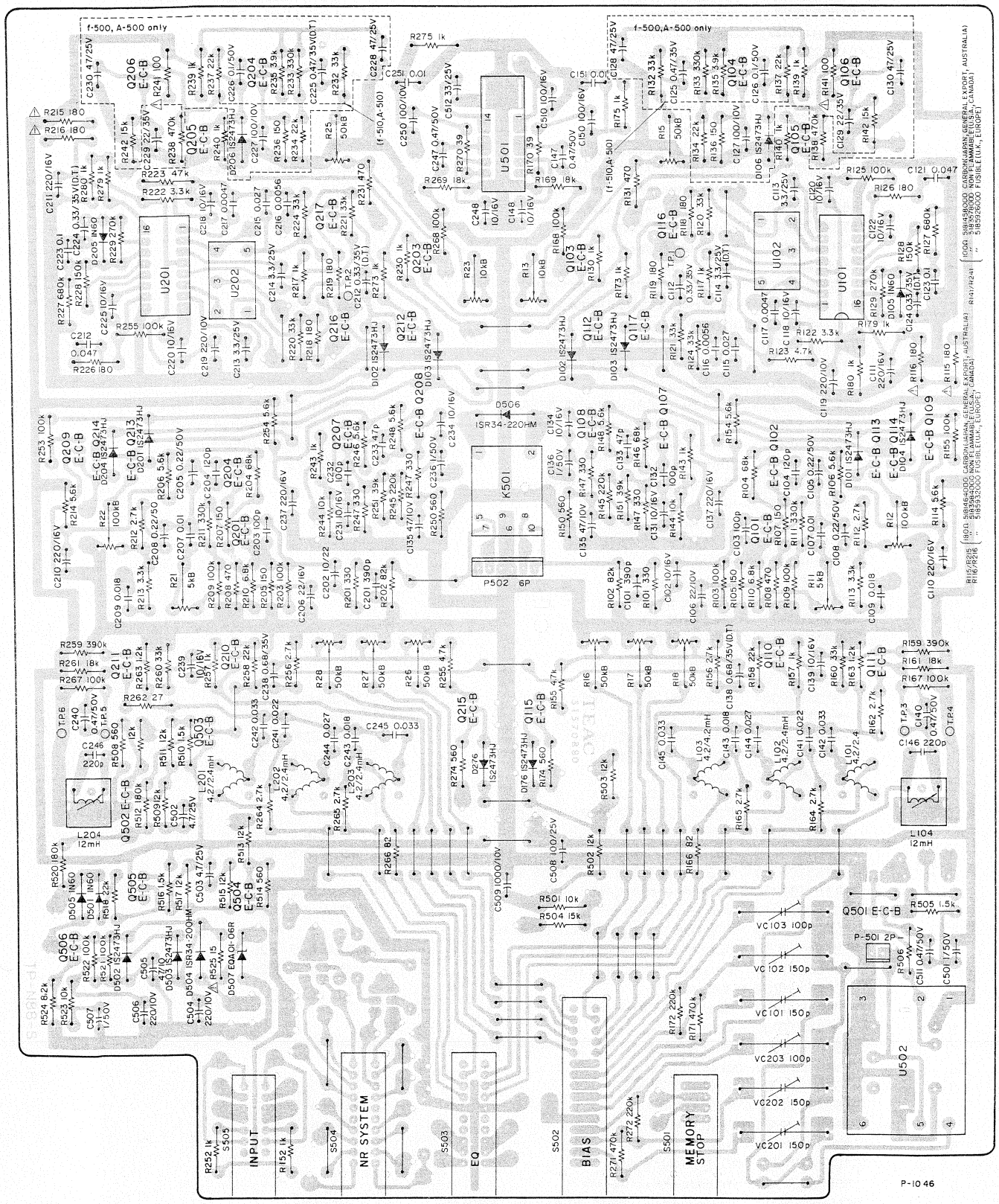
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
5 - 1	⚠*5128034000	Cord, AC Power	JAPAN, GENERAL EXPORT
	⚠*5128075000	Cord, AC Power	U.S.A., CANADA
	⚠*5128017000	Cord, AC Power	EUROPE
	⚠*5128036000	Cord, AC Power	U.K.
	⚠*5128031000	Cord, AC Power	AUSTRALIA
5 - 2	*5552339000	Panel, Rear	
5 - 3	*5555063000	Washer, GND	
5 - 4	*5534118000	Push Rivet	
5 - 5	*5555570000	Cushion, Top Cover; B	
5 - 6	*5534660000	Strain Relief, AC Power Cord	All except U.K., AUSTRALIA
	*5534661000	Strain Relief, AC Power Cord	U.K.
	*5534663000	Strain Relief, AC Power Cord	AUSTRALIA
5 - 7	*5534624000	Escutcheon, Remote	
5 - 8	*5122336000	Connector, Socket; 12P	
5 - 9	*5555566000	Plate, Connector	
5 - 10	*5168801000	PCB Assy, REMOTE CONTROL	
	*5167801000	PCB, REMOTE CONTROL	Part of 5 - 10
	5181484000	Carbon Res., 1.2 k ohm ¼W 5%	Part of 5 - 10
5 - 11	*5158151000	PCB Assy, IN/OUTPUT (2)	All except EUROPE
	*5158150000	PCB Assy, IN/OUTPUT (1)	EUROPE
	*5157150000	PCB, IN/OUTPUT	Part of 5 - 11
	5181526000	Carbon Res. 68 k ohm ¼W 5%	R301, R302 Part of 5 - 11
	5181534000	Carbon Res. 150 k ohm ¼W 5%	R303, R304 Part of 5 - 11
	*5126039000	Terminal Assy	All except EUROPE
	*5126030100	Terminal Assy (with DIN)	EUROPE
5 - 12	*5158144002	PCB Assy, REC/PLAY AMPL. (2)	
5 - 13	*5122168000	Connector, Socket; 6P	
5 - 14	*5122164000	Connector, Socket; 2P	
5 - 15	*5158161000	PCB Assy, CONTROL	
5 - 16	*5534473000	Rivet, T-type	
5 - 17	*5555563000	Paper, Shield	
5 - 18	*5552340100	Chassis, Bottom	
5 - 19	*5551031200	Chassis, Side	
5 - 20	*5555565200	Bracket, PCB	
5 - 21	*5581038000	Clamper, Cord; A	
5 - 22	*5504676000	Foot	
5 - 23	*5181520001	PCB Accy, JACK; 105	All except EUROPE
	*5157152001	PCB, JACK; 105	Part of 5 - 23
	*5158090001	PCB Assy, JACK; 104	EUROPE
	*5157090000	PCB, JACK; 104	Part of 5 - 23
	*5124028100	Jack, MIC; L	Part of 5 - 23
	*5124023000	Jack, MIC; R	Part of 5 - 23
5 - 24	*5158089000	PCB Assy, OUTPUT VAR. RES.	
	*5157089000	PCB, Input VAR. RES.	Part of 5 - 24
	5150255000	Var. Res., 20 k ohm - A x 2	Part of 5 - 24
5 - 25	*5158157000	PCB Assy, INPUT VAR. RES. (2)	
	*5157157000	PCB, Input VAR. RES.; 120	Part of 5 - 25
	5150228000	Var. Res., 100 k ohm - A	Part of 5 - 25
5 - 26	*5158156000	PCB Assy, INPUT VAR. RES. (1)	
	*5157156000	PCB, Input VAR. RES.; 119	Part of 5 - 26
	5150228000	Var. Res., 100 k ohm - A	Part of 5 - 26
5 - 27	*5555884000	Washer	
5 - 28	*5504678000	Gear Assy, Friction	
5 - 29	*5504677000	Gear Assy, A	
5 - 30	*5555885000	Mask, Switch	
5 - 31	*5503233000	Chassis, Front	
5 - 32	*5158163000	PCB Assy, TIMER	
	*5210000100	PCB, TIMER	Part of 5 - 32
	5133019000	Switch, Rotary; DP3T	Part of 5 - 32
5 - 33	*5534431000	Button, B	
5 - 34	*5534221000	Rod, Power Switch	
5 - 35	*5555561000	Bracket, Power Switch	
5 - 36	⚠*5052905000	Spark Killer, 0.1 mfd +120 ohm 400V AC	JAPAN
	⚠*5052906000	Spark Killer, 0.033 mfd +120 ohm 125V AC	U.S.A.
	*5052911000	Spark Killer, 0.033 mfd +120 ohm 250V AC	CANADA

(Continued on page 33)

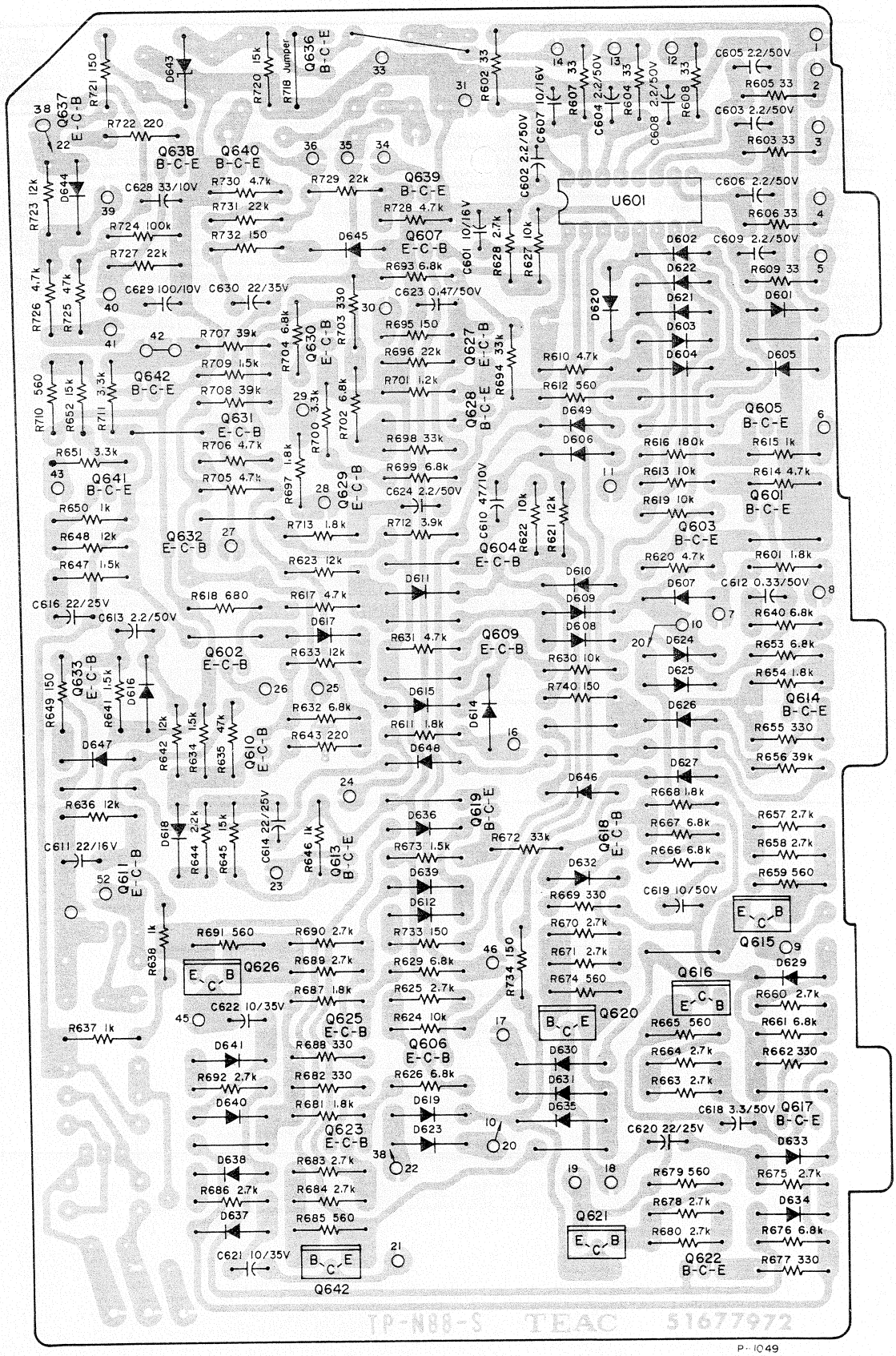
7 PC BOARDS AND PARTS LIST

PC Boards shown viewed from foil side.

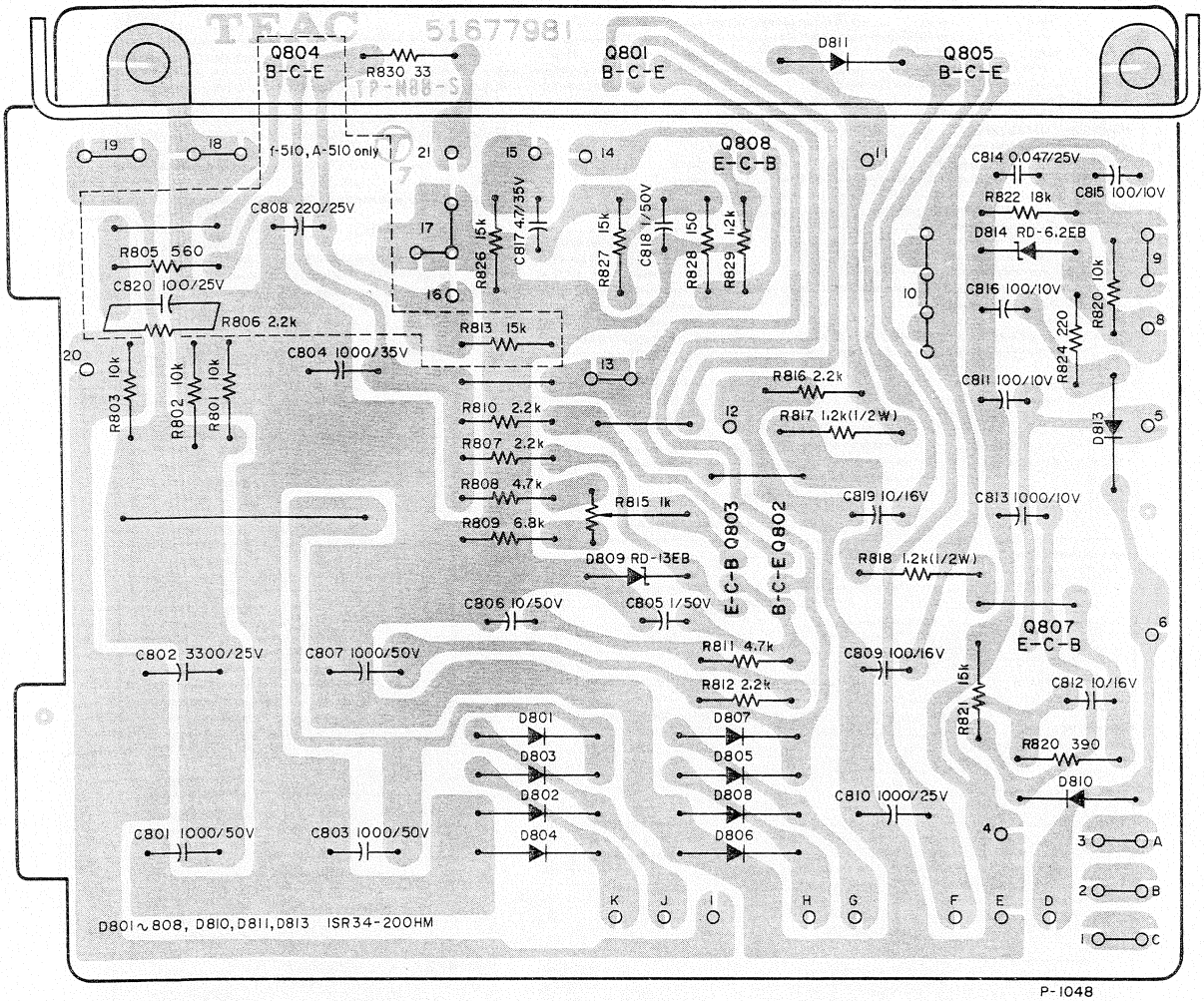
REC AND PLAY PCB ASSY



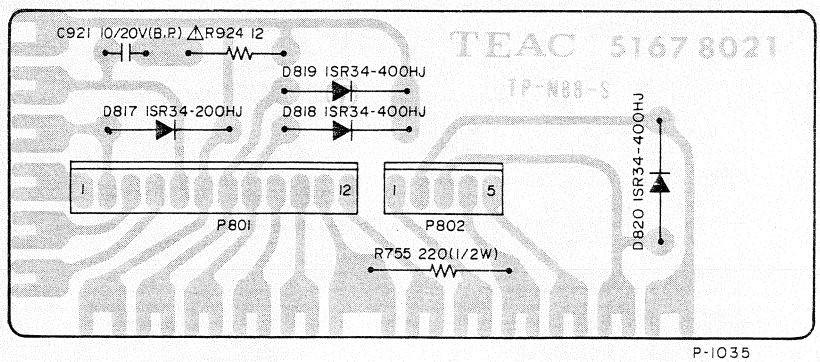
CONTROL PCB ASSY



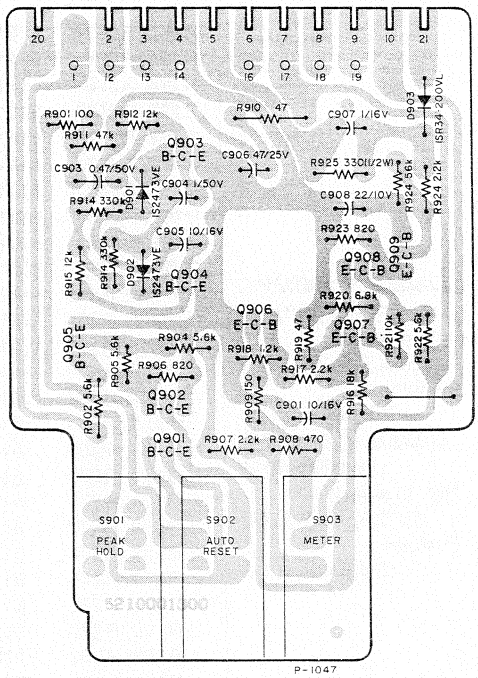
POWER SUPPLY PCB ASSY



JOINT PCB ASSY



METER AMPL PCB ASSY (A-510MKII, f-510MKII)



REC AND PLAY PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5158154002	PCB Ass'y (A-510MKII, f-510MKII)
	5158153002	PCB Ass'y (A-500MKII, f-500MKII)
	5157088001	PCB
	ICs	
U101, U201	5042728000	Dolby
U501	5147074000	Head phone
	TRANSISTORS	
Q101, Q201	5145034000	2SC900UA
Q102, Q202	5145034000	2SC900UA
Q103, Q203	5042549000	2SC1636-1
Q104, Q204	5145122000	2SC2021LNF(S) (A-500MKII, f-500MKII)
Q105, Q205	5145122000	2SC2021LNF(S) (A-500MKII, f-500MKII)
Q107, Q207	5145034000	2SC900UA
Q108, Q208	5145122000	2SC2021LNF(S)
Q109, Q209	5145122000	2SC2021LNF(S)
Q110, Q210	5042549000	2SC1636-1
Q111, Q211	5145034000	2SC900UA
Q112, Q212	5145122000	2SC2021LNF(S)
Q113, Q213	5145102000	FET, 2SK68AL
Q114, Q214	5145102000	FET, 2SK68AL
Q115, Q215	5145102000	FET, 2SK68AL
Q116, Q216	5145102000	FET, 2SK68AL
Q117, Q217	5145102000	FET, 2SK68AL
Q501	5145098000	2SC1741Q
Q502	5145122000	2SC2021LNF(S)
Q503	5145123000	2SA786LNF(R)
Q504	5145122000	2SC2021LNF(S)
Q505	5145123000	2SA786LNF(R)
Q506	5145123000	2SA786LNF(R)
	DIODES	
D101, D201	5143118000	1S2473HJ
D102, D202	5143118000	1S2473HJ
D103, D203	5143118000	1S2473HJ
D104, D204	5143118000	1S2473HJ
D105, D205	5142213000	1N60
D106, D206	5143118000	1S2473HJ (A-500MKII, f-500MKII)
D176, D276	5143118000	1S2473HJ
D501	5042213000	1N60
D502	5143118000	1S2473HJ
D503	5143118000	1S2473HJ
D504	5143113000	1SR34-200HM
D505	5042213000	1N60
D506	5143113000	1SR34-200HM
D507	5143153000	Zener, EQA01-06R
	RESISTORS	
	All resistors are rated ±5% tolerance, ¼ watt and of carbon resistors unless otherwise noted.	
R101, R201	5181470000	330 ohm
R102, R202	5181528000	82 k ohm
R103, R203	5181530000	100 k ohm
R104, R204	5181526000	68 k ohm

REF. NO.	PARTS NO.	DESCRIPTION	
R105, R205	5181462000	150 ohm	
R106, R206	5181500000	5.6 k ohm	
R107, R207	5181462000	150 ohm	
R108, R208	5181474000	470 ohm	
R109, R209	5181530000	100 k ohm	
R110, R210	5181506000	6.8 k ohm	
R111, R211	5181542000	330 k ohm	
R112, R212	5181492000	2.7 k ohm	
R113, R213	5181494000	3.3 k ohm	
R114, R214	5181500000	5.6 k ohm	
R115, R215	⚠5181464000	180 ohm	(JAPAN, G. EXPORT, AUSTRALIA)
R115, R215	⚠5183584000	180 ohm	Non Flammable (U.S.A., CANADA)
R115, R215	⚠5185932000	180 ohm	Fusible (EUROPE, U.K.)
R116, R216	⚠5181464000	180 ohm	(JAPAN, G. EXPORT, AUSTRALIA)
R116, R216	⚠5183584000	180 ohm	Non Flammable (U.S.A., CANADA)
R116, R216	⚠5185932000	180 ohm	Fusible (EUROPE, U.K.)
R117, R217	5181482000	1 k ohm	
R118, R218	5181464000	180 ohm	
R119, R219	5181464000	180 ohm	
R120, R220	5181518000	33 k ohm	
R121, R221	5181518000	33 k ohm	
R122, R222	5181494000	3.3 k ohm	
R123, R223	5181522000	47 k ohm	
R124, R224	5181518000	33 k ohm	
R125, R225	5181530000	100 k ohm	
R126, R226	5181464000	180 ohm	
R127, R227	5181550000	680 k ohm	
R128, R228	5181534000	150 k ohm	
R129, R229	5181540000	270 k ohm	
R130, R230	5181482000	1 k ohm	
R131, R231	5181474000	470 ohm	
R132, R232	5181518000	33 k ohm	(A-500MKII, f-500MKII)
R133, R233	5181542000	330 k ohm	(A-500MKII, f-500MKII)
R134, R234	5181514000	22 k ohm	(A-500MKII, f-500MKII)
R135, R235	5181496000	3.9 k ohm	(A-500MKII, f-500MKII)
R136, R236	5181462000	150 ohm	(A-500MKII, f-500MKII)
R137, R237	5181514000	22 k ohm	(A-500MKII, f-500MKII)
R138, R238	5181546000	470 k ohm	(A-500MKII, f-500MKII)
R139, R239	5181482000	1 k ohm	(A-500MKII, f-500MKII)
R140, R240	5181482000	1 k ohm	(A-500MKII, f-500MKII)
R141, R241	5181458000	100 ohm	(JAPAN, G. EXPORT, AUSTRALIA)
R141, R241	⚠5183578000	100 ohm	Non Flammable (U.S.A., CANADA)
R141, R241	5185926000	100 ohm	Fusible (EUROPE, U.K.) (A-500MKII, f-500MKII)
R142, R242	5181510000	15 k ohm	(A-500MKII, f-500MKII)
R143, R243	5181482000	1 k ohm	
R144, R244	5181506000	10 k ohm	
R145, R245	5181538000	220 k ohm	
R146, R246	5181526000	68 k ohm	
R147, R247	5181470000	330 ohm	
R148, R248	5181500000	5.6 k ohm	
R149, R249	5181470000	330 ohm	
R150, R250	5181476000	560 ohm	
R151, R251	5181520000	39 k ohm	
R152, R252	5181482000	1 k ohm	

REF. NO.	PARTS NO.	DESCRIPTION	
R153, R253	5181530000	100 k ohm	
R154, R254	5181500000	5.6 k ohm	
R155, R255	5181498000	4.7 k ohm	
R156, R256	5181492000	2.7 k ohm	
R157, R257	5181482000	1 k ohm	
R158, R258	5181514000	22 k ohm	
R159, R259	5181544000	390 k ohm	
R160, R260	5181518000	33 k ohm	
R161, R261	5181512000	18 k ohm	
R162, R262	5181444000	27 ohm	
R163, R263	5181484000	1.2 k ohm	
R164, R264	5181492000	2.7 k ohm	
R165, R265	5181492000	2.7 k ohm	
R166, R266	5181456000	82 ohm	
R167, R267	5181530000	100 k ohm	
R168, R268	5181530000	100 k ohm	
R169, R269	5181512000	18 k ohm	
R170, R270	5181448000	39 ohm	
R171, R271	5181546000	470 k ohm	
R172, R272	5181538000	220 k ohm	
R173, R273	5181482000	1 k ohm	
R174, R274	5181476000	560 ohm	
R175, R275	5181482000	1 k ohm	
R179, R279	5181482000	1 k ohm	
R180, R280	5181482000	1 k ohm	
R181, R281	5181546000	470 k ohm	
R501	5181496000	10 k ohm	
R502	5181508000	12 k ohm	
R503	5181508000	12 k ohm	
R504	5181510000	15 k ohm	
R505	5181486000	1.5 k ohm	
R506	5181410000	1 ohm	
R507	5181508000	12 k ohm	
R508	5181476000	560 ohm	
R509	5181508000	12 k ohm	
R510	5181486000	1.5 k ohm	
R511	5181508000	12 k ohm	
R512	5181536000	180 k ohm	
R513	5181508000	12 k ohm	
R514	5181476000	560 ohm	
R515	5181508000	12 k ohm	
R516	5181486000	1.5 k ohm	
R517	5181508000	12 k ohm	
R518	5181514000	22 k ohm	
R520	5181536000	180 k ohm	
R521	5181530000	100 k ohm	
R522	5181530000	100 k ohm	
R523	5181496000	10 k ohm	
R524	5181504000	8.2 k ohm	
R525	⚠5181828000	15 ohm	Non Flammable

CAPACITORS

C101, C201	5172219000	Ceramic	390 pfd	50V	
C102, C202	5173571800	Elec.	10 mfd	16V	20% (MD)
C103, C203	5172212000	Ceramic	100 pfd	50V	
C104, C204	5172213000	Ceramic	120 pfd	50V	
C105, C205	5173552800	Elec.	0.22 mfd	50V	20% (MD)
C106, C206	5173017800	Elec.	22 mfd	10V(USM)	
C107, C207	5171856800	Mylar	0.01 mfd	100V	5%
C108, C208	5173552800	Elec.	0.22 mfd	50V(MD)	
C109, C209	5171862800	Mylar	0.018 mfd	100V	5%
C110, C210	5173054800	Elec.	220 mfd	16V(USM)	
C111, C211	5173054800	Elec.	220 mfd	16V(USM)	

REF. NO.	PARTS NO.	DESCRIPTION
C112, C212	5170300100	Dip. Tant. 0.33 mfd 35V 10%
C113, C213	5173561800	Elec. 3.3 mfd 25V(MD)
C114, C214	5173561800	Elec. 3.3 mfd 25V(MD)
C115, C215	5171866800	Mylar 0.027 mfd 100V 5%
C116, C216	5170370800	Mylar 0.0056 mfd 100V 5%
C117, C217	5170368800	Mylar 0.0047 mfd 100V 5%
C118, C218	5173010800	Elec. 10 mfd 16V(USM)
C119, C219	5173053800	Elec. 220 mfd 10V(USM)
C120, C220	5173010800	Elec. 10 mfd 16V(USM)
C121, C221	5171872800	Mylar 0.047 mfd 100V 5%
C122, C222	5173010800	Elec. 10 mfd 16V(USM)
C123, C223	5171878800	Mylar 0.1 mfd 100V 5%
C124, C224	5170300100	Dip. Tant. 0.33 mfd 35V 10%
C125, C225	5054668100	Dip. Tant. 0.47 mfd 35V (A-500MKII, f-500MKII)
C126, C226	5173550800	Elec. 0.1 mfd 50V(MD) (A-500MKII, f-500MKII)
C127, C227	5173044800	Elec. 100 mfd 10V(USM) (A-500MKII, f-500MKII)
C128, C228	5173037800	Elec. 47 mfd 25V(USM) (A-500MKII, f-500MKII)
C129, C229	5173020800	Elec. 22 mfd 35V(USM) (A-500MKII, f-500MKII)
C130, C230	5173037800	Elec. 47 mfd 25V(USM) (A-500MKII, f-500MKII)
C131, C231	5173010800	Elec. 10 mfd 16V(USM)
C132, C232	5172212000	Ceramic 100 pfd 50V
C133, C233	5172208000	Ceramic 47 pfd 50V
C134, C234	5173010800	Elec. 10 mfd 16V(USM)
C135, C235	5173035800	Elec. 47 mfd 10V(USM)
C136, C236	5173556800	Elec. 1 mfd 50V(MD)
C137, C237	5173054800	Elec. 220 mfd 16V(USM)
C138, C238	5054669100	Dip. Tant. 0.68 mfd 35V 10%
C139, C239	5173010800	Elec. 10 mfd 16V(USM)
C140, C240	5173554800	Elec. 0.47 mfd 50V(MD)
C141, C241	5171862800	Mylar 0.018 mfd 100V 5%
C142, C242	5171866800	Mylar 0.027 mfd 100V 5%
C143, C243	5171864800	Mylar 0.022 mfd 100V 5%
C144, C244	5171868800	Mylar 0.033 mfd 100V 5%
C145, C245	5171868800	Mylar 0.033 mfd 100V 5%
C146, C246	5054745000	Dip. Mica 220 pfd 50V
C147, C247	5173554800	Elec. 0.47 mfd 50V(MD)
C148, C248	5173010800	Elec. 10 mfd 16V(USM)
C150, C250	5173045800	Elec. 100 mfd 16V(USM)
C151, C251	5171856800	Mylar 0.01 mfd 100V 5%
C501	5172992800	Elec. 1 mfd 50V(USM)
C502	5173564800	Elec. 4.7 mfd 25V(MD)
C503	5173564800	Elec. 4.7 mfd 25V(USM)
C504	5173054800	Elec. 220 mfd 16V(USM)
C505	5173035800	Elec. 47 mfd 10V(USM)
C506	5173053800	Elec. 220 mfd 10V(USM)
C507	5172992800	Elec. 1 mfd 50V(USM)
C508	5173046800	Elec. 100 mfd 25V(USM)
C509	5173080800	Elec. 1000 mfd 10V(USM)
C511	5173554800	Elec. 0.47 mfd 50V(MD)
C512	5173028800	Elec. 33 mfd 25V(USM)

VARIABLE RESISTORS

R11, R21	5150097000	Semi-fixed, 5 k ohm - B
R12, R22	5150096000	Semi-fixed, 100 k ohm - B
R13, R23	5150092000	Semi-fixed, 10 k ohm - B
R15, R25	5150094000	Semi-fixed, 50 k ohm - B
R16, R26	5150094000	Semi-fixed, 50 k ohm - B
R17, R27	5150094000	Semi-fixed, 50 k ohm - B
R18, R28	5150094000	Semi-fixed, 50 k ohm - B

TRIMMER CAPACITORS

VC101, VC201	5170017000	150 pfd	MAX
VC102, VC202	5170017000	150 pfd	MAX
VC103, VC203	5170017000	150 pfd	MAX

MISCELLANEOUS

U102, U202	5160066000	MPX Filter Unit
L101, L201	5056637000	Coil, Rec EQ; 4.2/2.4 mH
L102, L202	5056037000	Coil, Rec EQ; 4.2/2.4 mH
L103, L203	5056037000	Coil, Rec EQ; 4.2/2.4 mH
L104, L204	5056655000	Coil, Trap; 12 mH
S501	5132037000	Switch, Lever; DPDT
S502	5132038000	Switch, Lever; 6P3T
S503	5132034000	Switch, Lever; 4P3T
S504	5132034000	Switch, Lever; 4P3T
S505	5132039000	Switch, Lever; 4PDT
U502	5040101000	Bias Oscillator Unit, 100 k Hz
K501	5061142000	Relay, DPDT
P501	5122126000	Connector, Plug; 2P
P502	5122130000	Connector, Plug; 6P

CONTROL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5158161000	PCB Assy
	5167797200	PCB
		IC
U601	5147047000	M-54410P
		TRANSISTORS
Q601 ~ Q603	5145092000	2SC1740LN(S)
Q604	5145133000	2SC1645(B)
Q605	5145092000	2SC1740LN(S)
Q606, Q607	5145092000	2SC1740LN(S)
Q609	5145092000	2SC1740LN(S)
Q610	5145131000	2SA933LN(R)
Q611	5145092000	2SC1740LN(S)
Q613	5145098000	2SC1741Q
Q614	5145131000	2SA933LN(R)
Q615, Q616	5145087000	2SD313(E)
Q617, Q618	5145131000	2SA933LN(R)
Q619	5145092000	2SC1740LN(S)
Q620, Q621	5145087000	2SD313(E)
Q622, Q623	5145131000	2SA933LN(R)
Q624	5145087000	2SD313(E)
Q625	5145131000	2SA933LN(R)
Q626	5145087000	2SD313(E)

REF. NO.	PARTS NO.	DESCRIPTION
Q627～Q630	5145092000	2SC1740LN(S)
Q631	5145131000	2SA933LN(R)
Q632, Q633	5145092000	2SC1740LN(S)
Q636～Q640	5145092000	2SC1740LN(S)
Q641	5145131000	2SA933LN(R)
Q642	5145092000	2SC1740LN(S)

DIODES

D601～D612	5143118000	1S2473HJ
D614～D627	5143118000	1S2473HJ
D629	5143118000	1S2473HJ
D630, D631	5143113000	1SR34-200HM
D632～D634	5143118000	1S2473HJ
D635	5143113000	1SR34-200HM
D636～D641	5143118000	1S2473HJ
D643	5143129000	Zener, RD-5.6EB
D644～D649	5143118000	1S2473HJ

CARBON RESISTORS

All resistors are rated ±5% tolerance and ¼ watt.

R601	5181488000	1.8 k ohm
R602～R609	5181446000	33 ohm
R610	5181498000	4.7 k ohm
R611	5181488000	1.8 k ohm
R612	5181476000	560 ohm
R613	5181506000	10 k ohm
R614	5181498000	4.7 k ohm
R615	5181482000	1 k ohm
R616	5181536000	180 k ohm
R617	5181498000	4.7 k ohm
R618	5181478000	680 ohm
R619	5181506000	10 k ohm
R620	5181498000	4.7 k ohm
R621	5181508000	12 k ohm
R622	5181506000	10 k ohm
R623	5181508000	12 k ohm
R624	5181506000	10 k ohm
R625	5181492000	2.7 k ohm
R626	5181502000	6.8 k ohm
R627	5181506000	10 k ohm
R628	5181492000	2.7 k ohm
R629	5181502000	6.8 k ohm
R630	5181506000	10 k ohm
R631	5181498000	4.7 k ohm
R632	5181502000	6.8 k ohm
R633	5181508000	12 k ohm
R634	5181486000	1.5 k ohm
R635	5181522000	47 k ohm
R636	5181508000	12 k ohm
R637, R638	5181482000	1 k ohm
R639	5181486000	1.5 k ohm
R640	5181502000	6.8 k ohm
R641	5181486000	1.5 k ohm
R642	5181508000	12 k ohm
R643	5181466000	220 ohm
R644	5181490000	2.2 k ohm
R645	5181510000	15 k ohm
R646	5181482000	1 k ohm
R647	5181486000	1.5 k ohm
R648	5181508000	12 k ohm
R649	5181462000	150 ohm

REF. NO.	PARTS NO.	DESCRIPTION
R650	5181482000	1 k ohm
R651	5181494000	3.3 k ohm
R652	5181510000	15 k ohm
R653	5181502000	6.8 k ohm
R654	5181488000	1.8 k ohm
R655	5181470000	330 ohm
R656	5181520000	39 k ohm
R657, R658	5181492000	2.7 k ohm
R659	5181476000	560 ohm
R660	5181492000	2.7 k ohm
R661	5181502000	6.8 k ohm
R662	5181470000	330 ohm
R663, R664	5181492000	2.7 k ohm
R665	5181476000	560 ohm
R666, R667	5181502000	6.8 k ohm
R668	5181488000	1.8 k ohm
R669	5181470000	330 ohm
R670, R671	5181492000	2.7 k ohm
R672	5181518000	33 k ohm
R673	5181486000	1.5 k ohm
R674	5181476000	560 ohm
R675	5181492000	2.7 k ohm
R676	5181502000	6.8 k ohm
R677	5181470000	330 ohm
R678	5181492000	2.7 k ohm
R679	5181476000	560 ohm
R680	5181492000	2.7 k ohm
R681	5181488000	1.8 k ohm
R682	5181470000	330 ohm
R683, R684	5181492000	2.7 k ohm
R685	5181476000	560 ohm
R686	5181492000	2.7 k ohm
R687	5181488000	1.8 k ohm
R688	5181470000	1.8 k ohm
R689, R690	5181492000	2.7 k ohm
R691	5181476000	560 ohm
R692	5181492000	2.7 k ohm
R693	5181502000	6.8 k ohm
R694	5181518000	33 k ohm
R695	5181462000	150 ohm
R696	5181514000	22 k ohm
R697	5181488000	1.8 k ohm
R698	5181518000	33 k ohm
R699	5181502000	6.8 k ohm
R700	5181494000	3.3 k ohm
R701	5181484000	1.2 k ohm
R702	5181502000	6.8 k ohm
R703	5181470000	330 ohm
R704	5181502000	6.8 k ohm
R705, R706	5181498000	4.7 k ohm
R707, R708	5181520000	39 k ohm
R709	5181486000	1.5 k ohm
R710	5181476000	560 ohm
R711	5181494000	3.3 k ohm
R712	5181496000	3.9 k ohm
R713	5181488000	1.8 k ohm
R720	5181510000	15 k ohm
R721	5181462000	150 ohm
R722	5281466000	220 ohm
R723	5281508000	12 k ohm
R724	5181530000	100 k ohm
R725	5181522000	47 k ohm
R726	5181498000	4.7 k ohm

REF. NO.	PARTS NO.	DESCRIPTION
R727	5181514000	22 k ohm
R728	5181498000	4.7 k ohm
R729	5181514000	22 k ohm
R730	5181498000	4.7 k ohm
R731	5181514000	22 k ohm
R732～R734	5181462000	150 ohm
R740	5181462000	150 ohm

CAPACITORS

C601	5171314800	Elec.	10 mfd	16V
C602～C606	5171290800	Elec.	2.2 mfd	50V
C607	5171314800	Elec.	10 mfd	16V
C608, C609	5171290800	Elec.	2.2 mfd	50V
C610	5171573000	Elec.	47 mfd	10V
C611	5171568000	Elec.	22 mfd	16V
C612	5171582000	Elec.	0.33 mfd	50V
C613	5171560000	Elec.	2.2 mfd	50V
C614	5181569000	Elec.	22 mfd	25V
C616	5171569000	Elec.	22 mfd	25V
C617	5171306800	Elec.	4.7 mfd	35V
C618	5171298800	Elec.	3.3 mfd	50V
C619	5171567000	Elec.	10 mfd	50V
C620	5171569000	Elec.	22 mfd	25V
C621, C622	5171318800	Elec.	10 mfd	35V
C623	5171280800	Elec.	0.47 mfd	50V
C624	5171290800	Elec.	2.2 mfd	50V
C627	5171356800	Elec.	100 mfd	10V
C628	5171338800	Elec.	33 mfd	16V
C629	5171356800	Elec.	100 mfd	10V
C630	5171330800	Elec.	22 mfd	35V

POWER SUPPLY PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5200001200	PCB Assy (A-500MKII, f-510MKII)
	5200001100	PCB Assy (A-500MKII, f-500MKII)
	5167798100	PCB

TRANSISTORS

Q801	5145087000	2SD313(E)
Q802, Q803	5145092000	2SC1740LN(S) (All except EUROPE, U.K.)
Q802, Q803		2SC954A(K) (EUROPE, U.K.)
Q804, Q805	5145087000	2SD313(E)
Q807	5145135000	2SD400MP(E)
Q808	5145092000	2SC1740LN(S)
Q808		2SC945A(K)

DIODES

D801～D808	5143113000	1SR34-200HM
D809	5143108000	Zener, RD-13EB
D810, D811	5143113000	1SR34-200HM
D813	5143113000	1SR34-200HM
D814	5042554000	Zener, RD-13EB

REF. NO.	PARTS NO.	DESCRIPTION

RESISTORS

All resistors are rated ±5% tolerance, ¼ watt and of carbon type unless otherwise noted.

R801～R803	5183106000	10 k ohm	
R805	5183076000	560 ohm	(A-510MKII, f-510MKII)
R805	5183082000	1 k ohm	(A-500MKII, f-500MKII)
R806	5181290000	2.2 k ohm	(A-510MKII, f-510MKII)
R806	5183090000	2.2 k ohm	(A-500MKII, f-500MKII)
R807	5183090000	2.2 k ohm	
R808	5183098000	4.7 k ohm	
R809	5183102000	6.8 k ohm	
R810	5183090000	2.2 k ohm	
R811	5183098000	4.7 k ohm	
R812	5183090000	2.2 k ohm	
R813	5183110000	15 k ohm	
R816	5183090000	2.2 k ohm	
R817, R818	5180084000	1.2 k ohm	
R820	5183070000	390 ohm	
R821	5183110000	15 k ohm	
R822	5183112000	18 k ohm	
R823	5183106000	10 k ohm	
R824	5183066000	220 ohm	
R826, R827	5183110000	15 k ohm	
R828	5183062000	150 ohm	
R829	5183084000	1.2 k ohm	
R830	5184237000	33 ohm	Non Flammable

CAPACITORS

C801	5172012800	Elec.	1000 mfd	50V(USM)
C802	5173094800	Elec.	3300 mfd	25V(USM)
C803	5172012800	Elec.	1000 mfd	50V(USM)
C804	5172011800	Elec.	1000 mfd	35V(USM)
C805	5171918800	Elec.	1 mfd	50V(USM)
C806	5171981800	Elec.	100 mfd	50V(USM)
C807	5172012800	Elec.	1000 mfd	50V(USM)
C808	5171988800	Elec.	220 mfd	25V(USM) (A-500MKII, f-500MKII)
C809	5173045800	Elec.	100 mfd	16V(USM)
C810	5172018000	Elec.	1000 mfd	25V(USM)
C811	5171977800	Elec.	100 mfd	10V(USM)
C812	5171939800	Elec.	10 mfd	16V(USM)
C813	5172008800	Elec.	1000 mfd	10V(USM)
C814	5172244000	Ceramic	0.047 mfd	25V
C815, C816	5171977800	Elec.	100 mfd	10V(USM)
C817	5171933800	Elec.	4.7 mfd	35V(USM)
C818	5171918800	Elec.	1 mfd	50V(USM)
C819	5171939800	Elec.	10 mfd	16V(USM)
C820	5055417800	Elec.	100 mfd	25V(USM) (A-510MKII, f-510MKII)

MISCELLANEOUS

R815	5053446000	Resistor, Semi-fixed; 1 k ohm - B
R815	5033295000	Tube, Insulating
R815	5033291000	Plate, Insulating

JOINT PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	5168802100	PCB Assy
	5167802100	PCB
D817	5143114000	Diode, 1SR34-400HM
D818	5143114000	Diode, 1SR34-400HM
D819	5143114000	Diode, 1SR34-400HM
D820	5143114000	Diode, 1SR34-400HM
R954	⚠5181828000	Resistor 15 ohm ¼W 5% Non Flammable
R955	5180066000	Carbon Res., 220 ohm ½W
C951	5055946000	Capacitor, Elec. 10 mfd 50V B.P.
P801	5122136000	Connector, Plug; 12P
P802	5122129000	Connector, Plug; 5P

METER AMPL PCB ASSY (A-510MKII, f-510MKII)

REF. NO.	PARTS NO.	DESCRIPTION
	5200001300	PCB Assy
	5210001300	PCB
	TRANSISTORS	
Q901～Q909	5145092000	2SC1740LN(S)
	DIODES	
D901, D902	5042517000	1S2473VE
D903	5143116000	1SR34-200VL
	CARBON RESISTORS	
	All resistors are rated ±5% tolerance and ¼ watt unless otherwise noted.	
R901	5057058000	100 ohm
R902	5057100000	5.6 k ohm
R904	5057100000	5.6 k ohm
R905	5057100000	5.6 k ohm
R906	5057080000	820 ohm
R907	5057090000	2.2 k ohm
R908	5057074000	470 ohm
R909	5057062000	150 ohm
R910	5057050000	47 ohm
R911	5057122000	47 k ohm
R912	5057108000	12 k ohm
R913	5057130000	100 k ohm
R914	5057142000	330 k ohm
R915	5057108000	12 k ohm
R916	5057112000	18 k ohm
R917	5057090000	2.2 k ohm
R918	5057084000	1.2 k ohm
R919	5057050000	47 ohm
R920	5057102000	6.8 k ohm
R921	5057106000	10 k ohm
R922	5057100000	5.6 k ohm
R923	5057080000	820 ohm
R924	5057090000	2.2 k ohm
R925	5180070000	330 ohm ½W
R926	5057124000	56 k ohm
	CAPACITORS	
C901	5055405000	Elec. 10 mfd 16V
C903	5055497000	Elec. 0.47 mfd 50V
C904	5055454000	Elec. 1 mfd 50V
C905	5055405000	Elec. 10 mfd 16V
C906	5055449000	Elec. 47 mfd 25V
C907	5055401000	Elec. 47 mfd 16V
C908	5055472000	Elec. 22 mfd 10V
	MISCELLANEOUS	
S901～S903	5134049000	Switch, Push: DPDT

(Continued from page 21)

Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 39	⚠*5052905000	Spark Killer, 0.1 mfd +120 ohm 400V AC	JAPAN
	⚠*5052906000	Spark Killer, 0.033 mfd +120 ohm 125V AC	U.S.A.
	⚠*5052911000	Spark Killer, 0.033 mfd +120 ohm 250V AC	CANADA
	⚠*5052908000	Spark Killer, 4700 pfd 250V AC	EUROPE, U.K.
	⚠*5052907000	Spark Killer, 0.01 mfd 300 ohm 400V AC	GENERAL EXPORT, AUSTRALIA
4 - 40	⚠*5134036000	Switch, Power	JAPAN, GENERAL EXPORT, AUSTRALIA
	⚠*5134011000	Switch, Power	EUROPE, U.K.
	⚠*5134037000	Switch, Power	U.S.A.
	⚠*5134018000	Switch, Power	CANADA
4 - 41	5040108000	Meter, FL Peak Level	
4 - 42	*5122172000	Connector, Socket; 10P	
4 - 43	*5555562000	Bracket, Meter	
4 - 44	*5553269100	Chassis, Amplifier	

Parts marked with *require longer delivery time than regular parts.

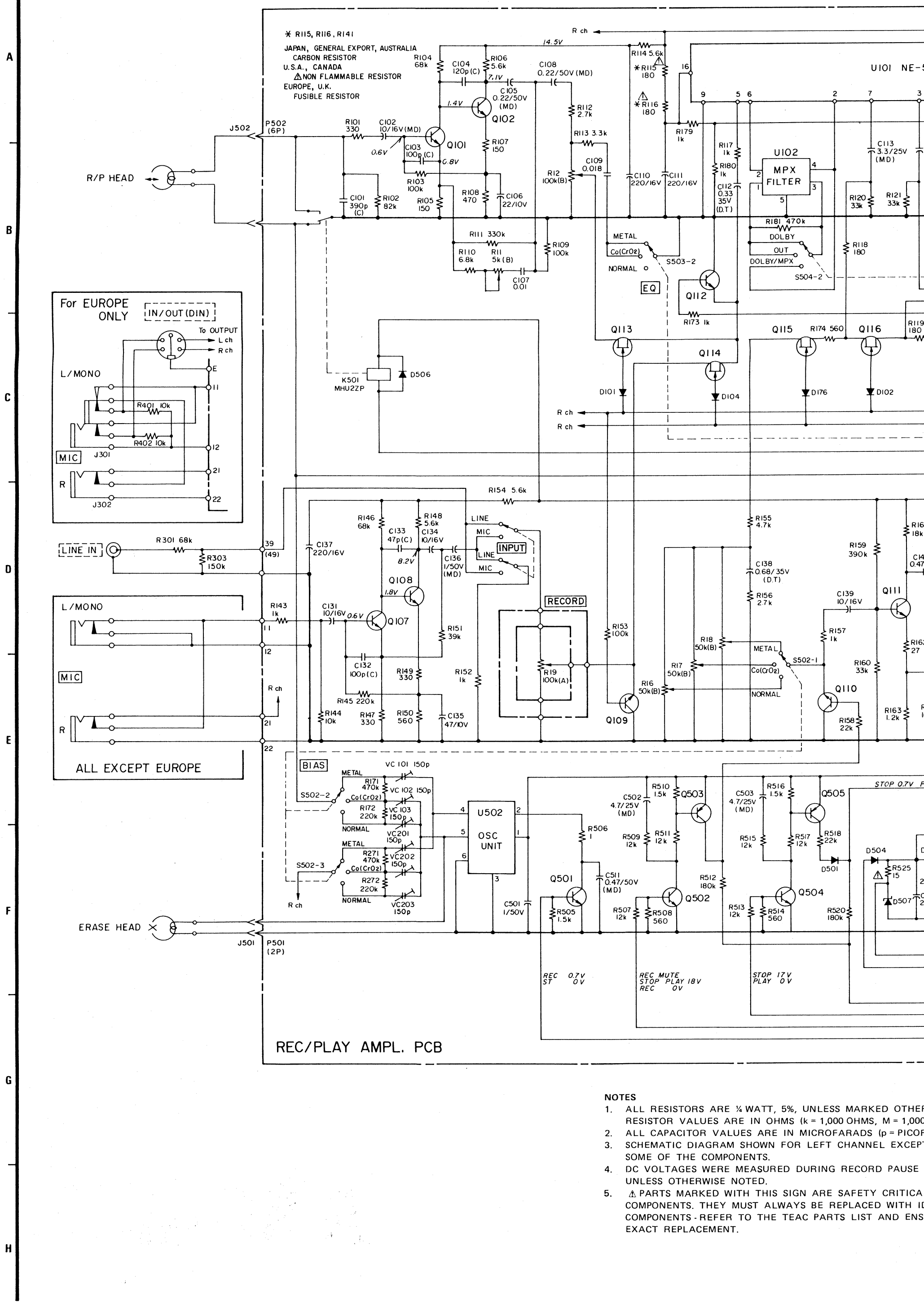
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 45	*5555632000	Nut, L	
4 - 46	*5555630000	Spacer, Transformer; A	
4 - 47	⚠ 5152175100	Transformer, Power	JAPAN
	⚠ 5152176100	Transformer, Power	U.S.A., CANADA
	5152180100	Transformer, Power	GENERAL EXPORT
	⚠ 5152178000	Transformer, Power	EUROPE, U.K., AUSTRALIA
4 - 48	*5555626000	Washer, Transformer	
4 - 49	*5555564100	Heat Sink	
4 - 50	*5200001200	PCB Assy, POWER SUPPLY	
4 - 51	*5033291000	Plate, Insulating	
4 - 52	5145087000	Transistor, 2SD313(E)	
4 - 53	*5033295000	Tube, Insulating	
4 - 54	*5555060000	Bracket, B	GENERAL EXPORT
4 - 55	*5167548100	PCB, Voltage Selector	GENERAL EXPORT
	*5555062000	Bar, Shorting; A	Part of 4 - 55
4 - 56	*5168973200	PCB Assy, FUSE	EUROPE, U.K., AUSTRALIA
	*5167973200	PCB, FUSE	Part of 4 - 56
	*5142087000	Holder, Fuse	Part of 4 - 56
	5142188000	Fuse, 1.6 AT 250V	Part of 4 - 56
	5041140000	Fuse, 1 AT 250V	Part of 4 - 56
	5041138000	Fuse, 500 mAT 250V	Part of 4 - 56

(Continued from page 23)

Parts marked with *require longer delivery time than regular parts.

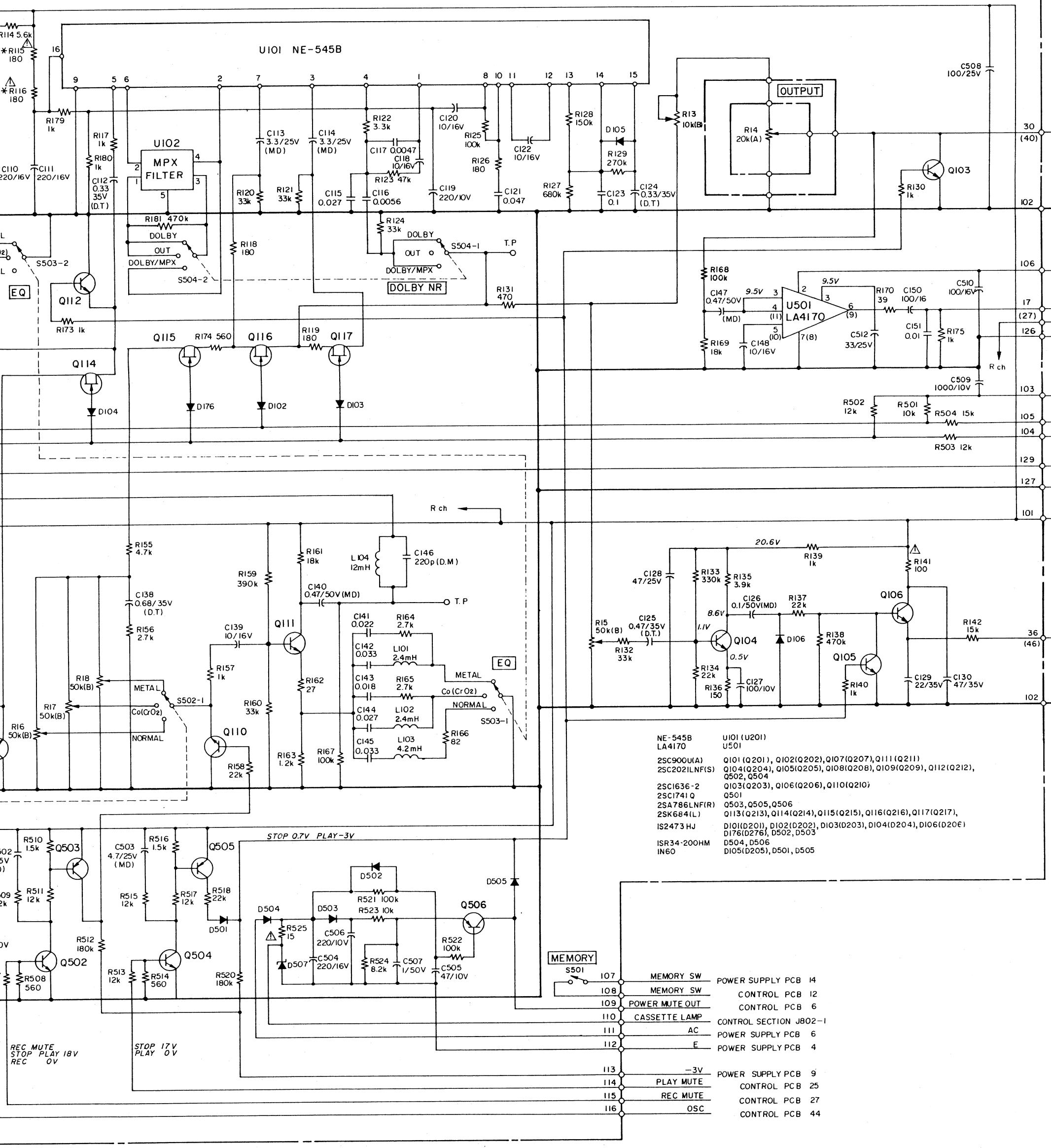
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	⚠*5052908000	Spark Killer, 4700 pfd 250V AC	EUROPE, U.K.
	⚠*5052907000	Spark Killer, 0.01 mfd 300 ohm 400V AC	GENERAL EXPORT, AUSTRALIA
5 - 37	⚠*5134036000	Switch, Power	JAPAN, GENERAL EXPORT, AUSTRALIA
	⚠*5134011000	Switch, Power	EUROPE, U.K.
	⚠*5134037000	Switch, Power	U.S.A.
	⚠*5134018000	Switch, Power	CANADA
5 - 38	*5165059000	Meter, Peak	
5 - 39	*5555562000	Bracket, Meter	
5 - 40	*5553269100	Chassis, Amplifier	
5 - 41	*5555632000	Nut, L	
5 - 42	*5555630000	Spacer, Transformer; A	
5 - 43	⚠ 5152181100	Transformer, Power	JAPAN
	⚠ 5152182100	Transformer, Power	U.S.A., CANADA
	⚠ 5152184000	Transformer, Power	EUROPE, U.K., AUSTRALIA
	⚠ 5152186100	Transformer, Power	GENERAL EXPORT
5 - 44	*5555626000	Washer, Transformer	
5 - 45	*5555564100	Heat Sink	
5 - 46	*5200001100	PCB Assy, POWER SUPPLY	
5 - 47	*5033291000	Plate, Insulating	
5 - 48	5145087000	Transistor, 2SD313(E)	
5 - 49	*5033295000	Tube, Insulating	
5 - 50	*5555060000	Bracket, B	GENERAL EXPORT
5 - 51	*5167548100	PCB, Voltage Selector	GENERAL EXPORT
	*5555062000	Bar, Shorting; A	Part of 5 - 51
5 - 52	*5168973200	PCB Assy, FUSE	EUROPE, U.K., AUSTRALIA
	*5167973200	PCB, FUSE	Part of 5 - 52
	*5142087000	Holder, Fuse	Part of 5 - 52
	5142188000	Fuse, 1.6 AT 250V	Part of 5 - 52
	5041140000	Fuse, 1 AT 250V	Part of 5 - 52
	5041138000	Fuse, 500 mAT 250V	Part of 5 - 52

TEAC SCHEMATIC DIAGRAM (AMPLIFIER) A-500MKII



NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHER
   RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000
2. ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOF
3. SCHEMATIC DIAGRAM SHOWN FOR LEFT CHANNEL EXCEPT
   SOME OF THE COMPONENTS.
4. DC VOLTAGES WERE MEASURED DURING RECORD PAUSE
   UNLESS OTHERWISE NOTED.
5. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICA
   COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH ID
   COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENS
   EXACT REPLACEMENT.

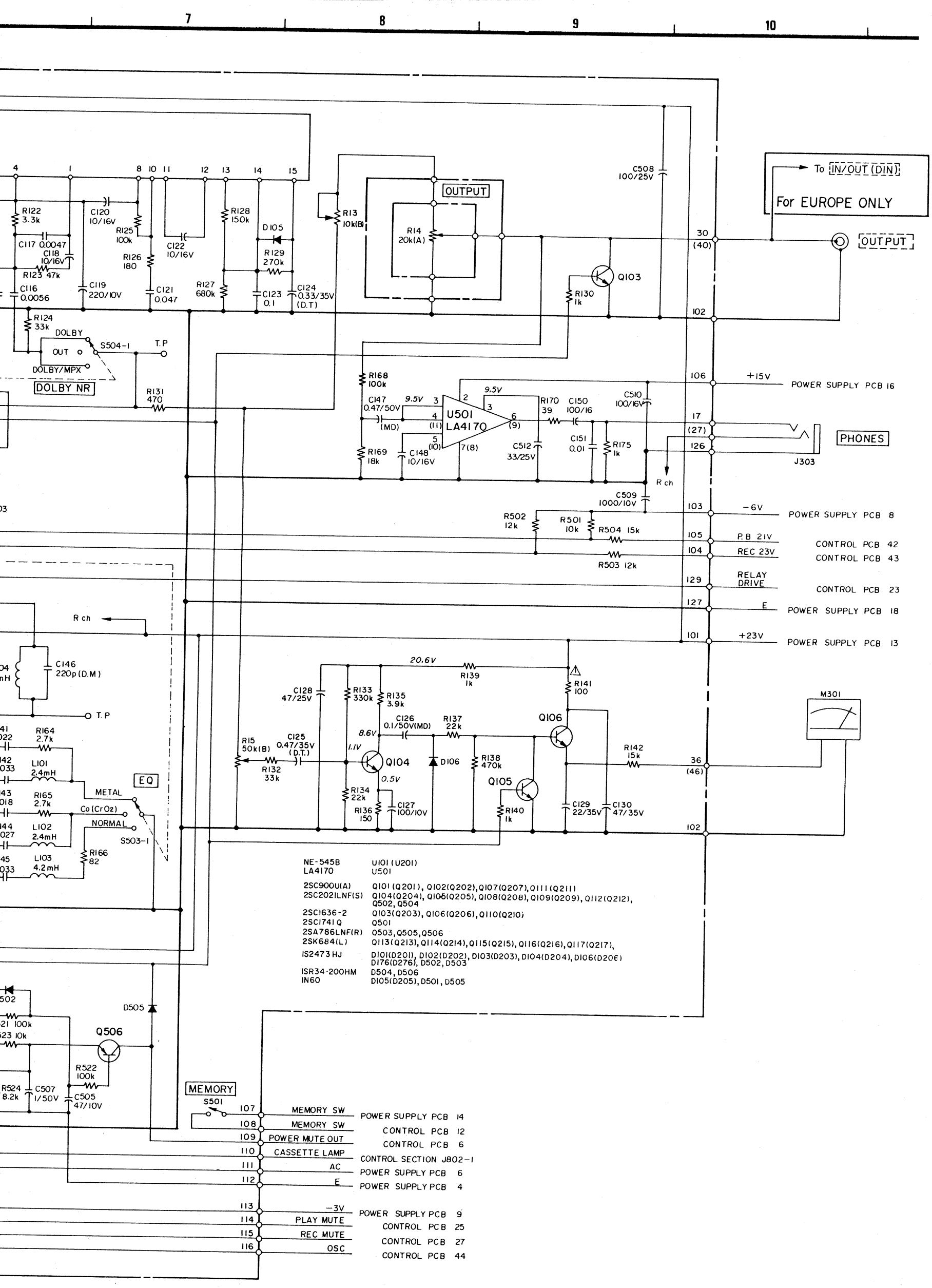


NOTES

ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE.
RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
SCHEMATIC DIAGRAM SHOWN FOR LEFT CHANNEL EXCEPT FOR SOME OF THE COMPONENTS.
DC VOLTAGES WERE MEASURED DURING RECORD PAUSE MODE UNLESS OTHERWISE NOTED.
⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.

A-500MK

Stereo Cassette D

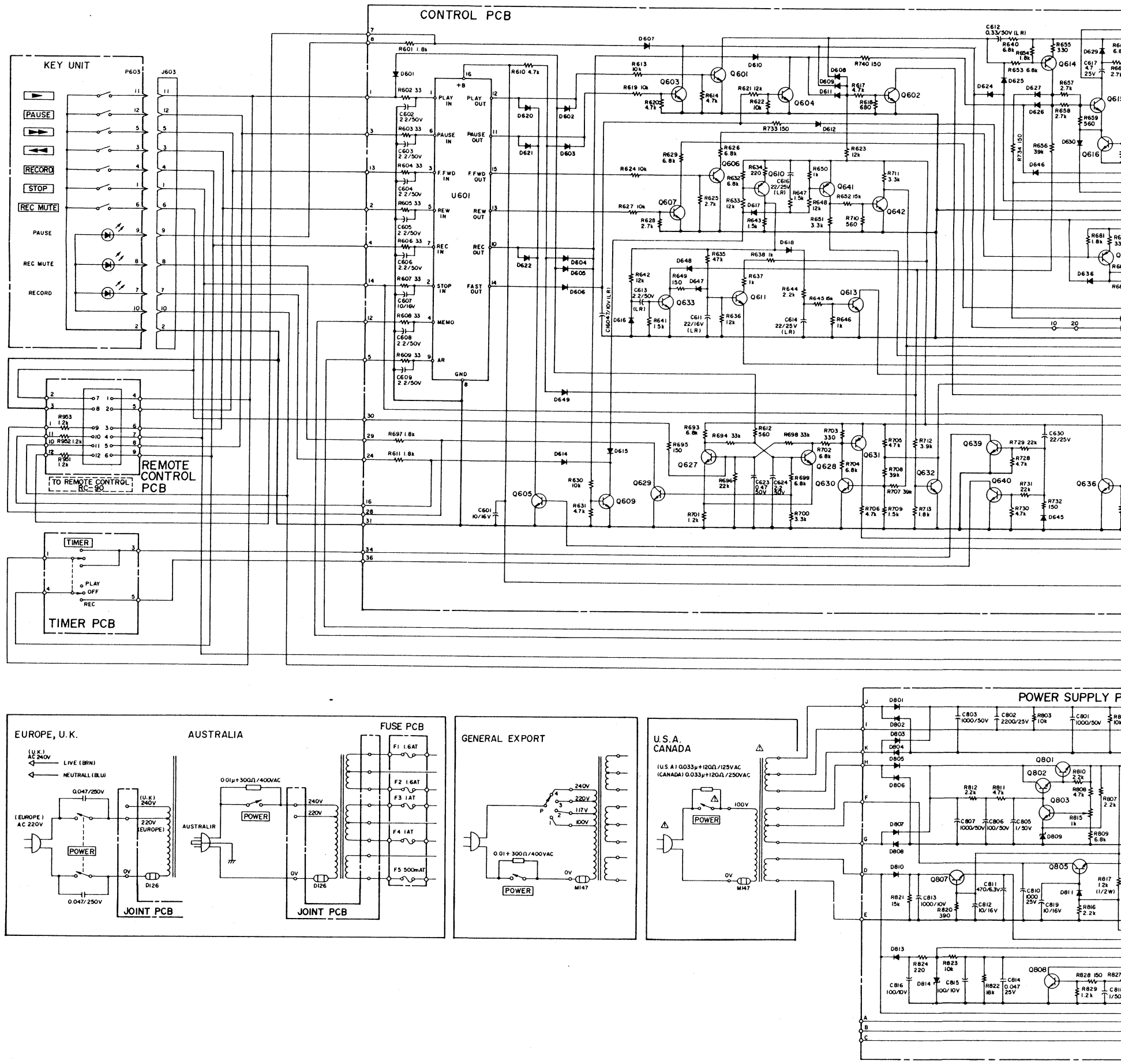


NE-5458	U101 (U201)
LA4170	U501
2SC900U(A)	Q101 (Q201), Q102(Q202), Q107(Q207), Q111 (Q211)
2SC2021LNF(S)	Q104(Q204), Q105(Q205), Q108(Q208), Q109(Q209), Q112(Q212), Q502, Q504
2SC1636-2	Q103(Q203), Q106(Q206), Q110(Q210)
2SC1741Q	Q501
2SA786LNF(R)	Q503, Q505, Q506
2SK684(L)	Q113(Q213), Q114(Q214), Q115(Q215), Q116(Q216), Q117(Q217),
IS2473HJ	D101(D201), D102(D202), D103(D203), D104(D204), D106(D206) D176(D276), D502, D503
ISR34-200HM	D504, D506
IN60	D105(D205), D501, D505

S).

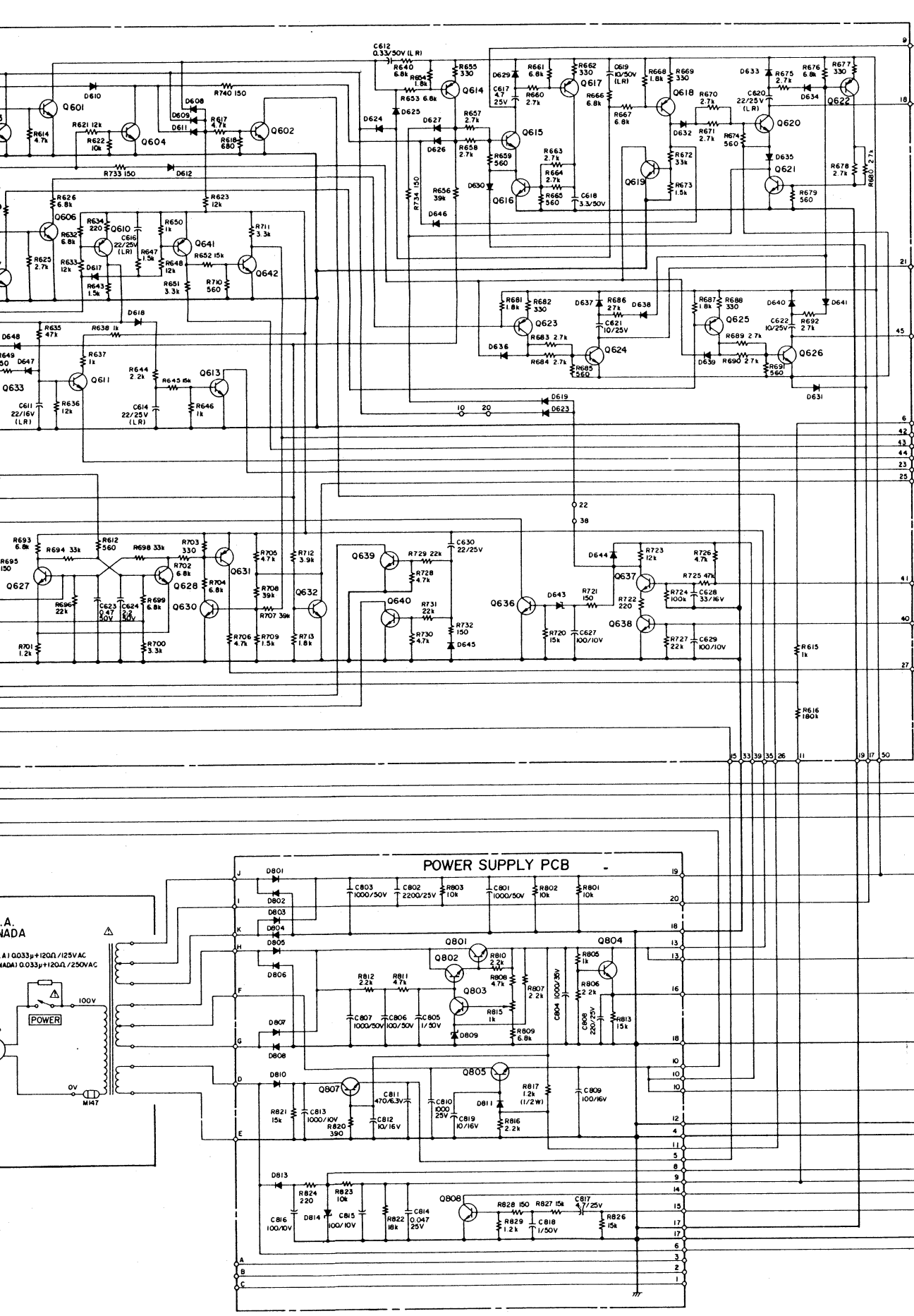
A-500MKII

Stereo Cassette Deck



NOTES

1. ALL RESISTORS ARE ¼ WATT, 5
2. RESISTOR VALUES ARE IN OHM
3. ⚠ PARTS MARKED WITH THIS
   COMPONENTS. THEY MUST ALW
   COMPONENTS - REFER TO THE
   EXACT REPLACEMENT.


POWER SUPPLY PCB
POWER
100V
0V
M147
TO AMPLIFIER SECTION
POWER MUTE R/P AMPL PCB 109
PLAY FET R/P AMPL PCB 105
REC FET R/P AMPL PCB 104
BIAS OSC R/P AMPL PCB 116
R/P RELAY R/P AMPL PCB 129
PLAY MUTE R/P AMPL PCB 114
REC MUTE R/P AMPL PCB 115
CASSETTE LAMP R/P AMPL PCB 110
MEMORY SW R/P AMPL PCB 108
+23V R/P AMPL PCB 101
+15V R/P AMPL PCB 106
0V R/P AMPL PCB 127
0V (AC) R/P AMPL PCB 112
−6V R/P AMPL PCB 103
−3V R/P AMPL PCB 113
AC 6V R/P AMPL PCB 111
MEMORY SW R/P AMPL PCB 107
0V (BARGRAPH) METER AMPL PCB 4
JOINT PCB
J801
P801
P802
J802

CONTROL PCB

U601	
Q601 ~ Q603, Q605 ~ Q607 Q609, Q611, Q619 Q627 ~ Q630, Q632, Q633 Q636 ~ Q640, Q642	
Q610, Q614, Q617, Q618 Q622, Q623, Q625, Q631 Q641	
Q615, Q616, Q620, Q621 Q624, Q626	
Q604	DARLINGTON PAIR
Q613	
D601 ~ D629, D632 ~ D634 D636 ~ D642, D644 ~ D649	
D630, D631, D635	
D643	

FUNCTION TABLE OF M544

INPUT SIGNAL (LOW LEVEL)	FAST	F.
STOP	L	
F.FWD	H	
REW	H	
PLAY	L	
PAUSE	L	
REC/PLAY	L	
REC/PAUSE	L	
AR	L ;	RE
MEMO	NOT	US

BLOCK DIAGRAM OF M544

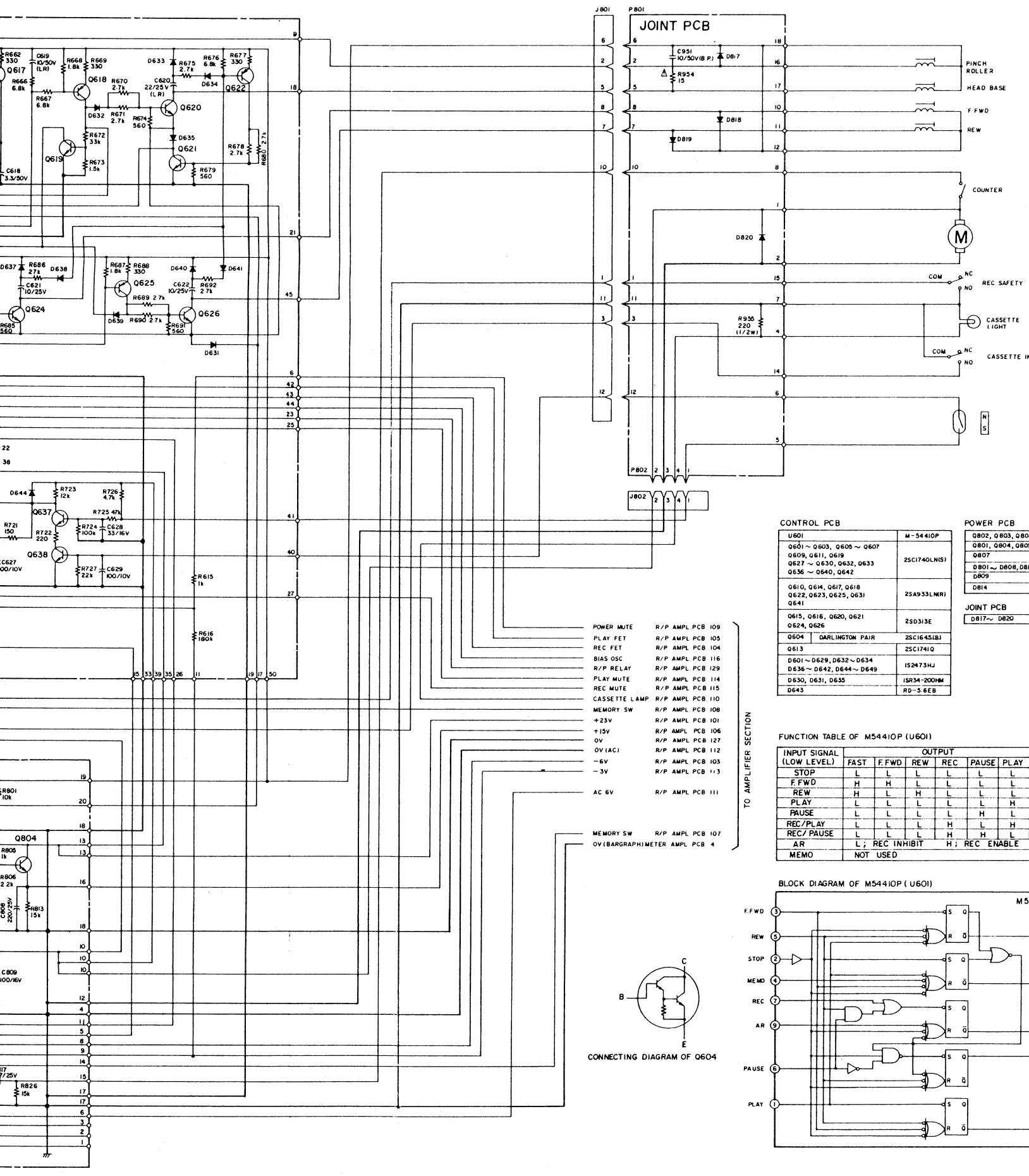
CONNECTING DIAGRAM OF Q604

NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE.
2. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
3. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.

A-50

Ste



CONTROL PCB

U601	M-54410P
Q601 ~ Q603, Q605 ~ Q607 Q609, Q611, Q619 Q627 ~ Q630, Q632, Q633 Q636 ~ Q640, Q642	2SC1740LN(S)
Q610, Q614, Q617, Q618 Q622, Q623, Q625, Q631 Q641	2SA933LN(R)
Q615, Q616, Q620, Q621 Q624, Q626	2SD313E
Q604 DARLINGTON PAIR	2SC1645(B)
Q613	2SC1741Q
D601 ~ D629, D632 ~ D634 D636 ~ D642, D644 ~ D649	IS2473HJ
D630, D631, D635	ISR34-200HM
D643	RD-5.6EB

POWER PCB

Q802, Q803, Q808	2SC1740LN(S)
Q801, Q804, Q805	2SD313(E)
Q807	2SD400MP(E)
D801 ~ D808, D810, D811, D813	ISR34-200HM
D809	RD-13EB
D814	RD-6.2EB

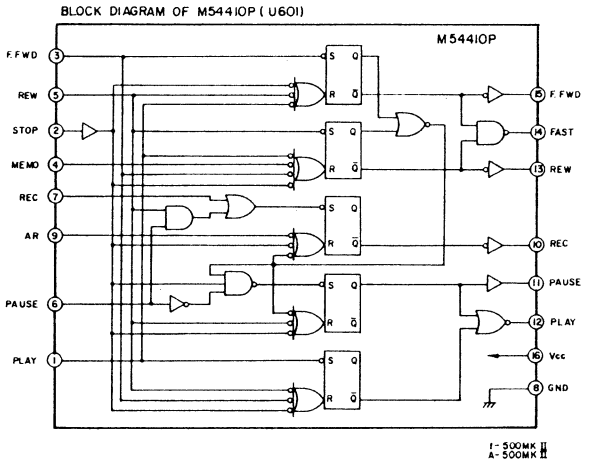
JOINT PCB

D817 ~ D820	ISR34-400HM

FUNCTION TABLE OF M54410P (U601)

INPUT SIGNAL (LOW LEVEL)	OUTPUT						OUTPUT MODE
	FAST	F.FWD	REW	REC	PAUSE	PLAY	
STOP	L	L	L	L	L	L	STOP
F.FWD	H	H	L	L	L	L	F.FWD
REW	H	L	H	L	L	L	REW
PLAY	L	L	L	L	L	H	PLAY
PAUSE	L	L	L	L	H	L	PAUSE
REC/PLAY	L	L	L	H	L	H	REC/PLAY
REC/PAUSE	L	L	L	H	H	L	REC/PAUSE
AR	L ; REC INHIBIT H ; REC ENABLE						
MEMO	NOT USED						

BLOCK DIAGRAM OF M54410P (U601)

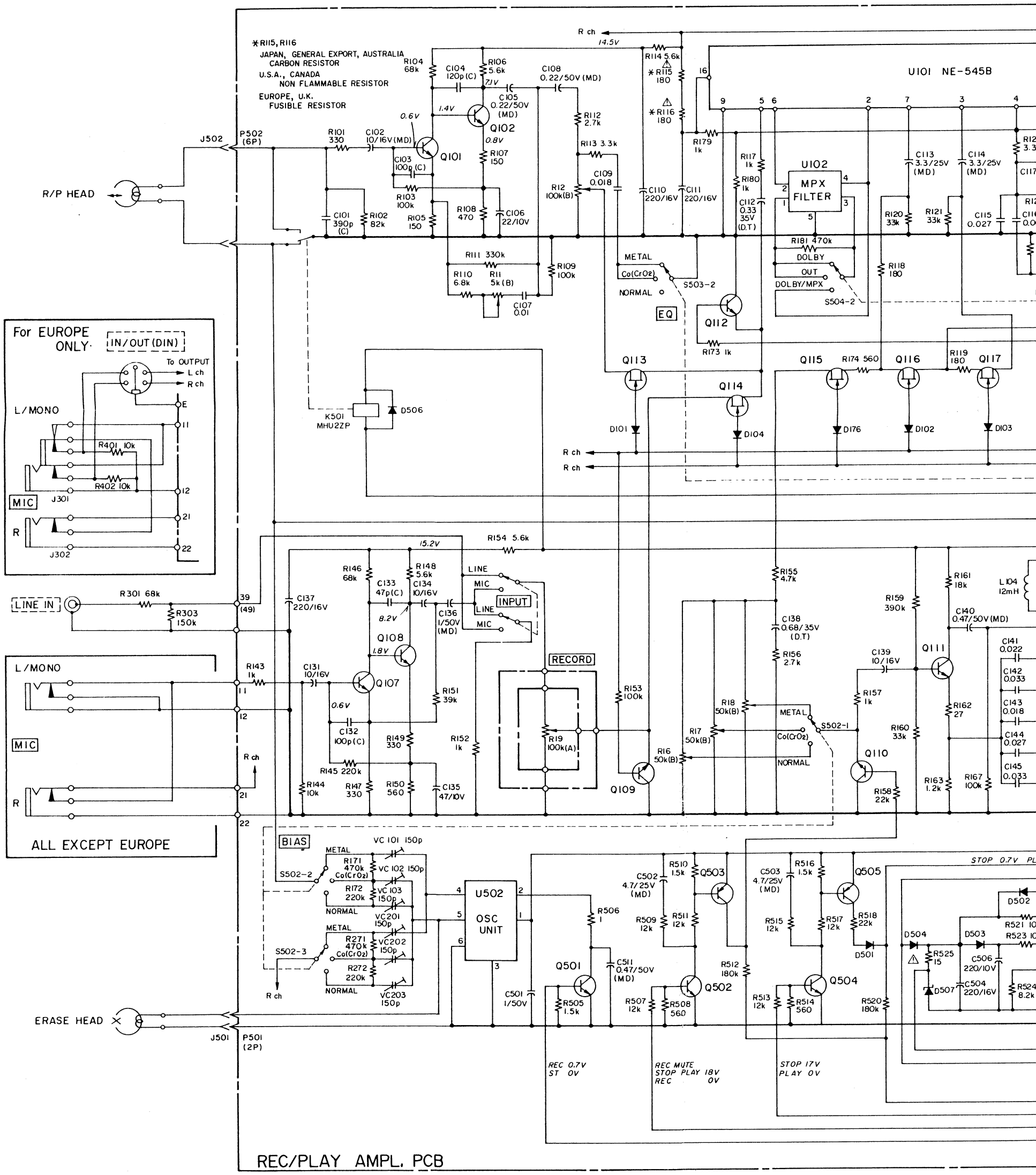


CONNECTING DIAGRAM OF Q604

UNLESS MARKED OTHERWISE.
k = 1,000 OHMS, M = 1,000,000 OHMS).
N ARE SAFETY CRITICAL
S BE REPLACED WITH IDENTICAL
C PARTS LIST AND ENSURE

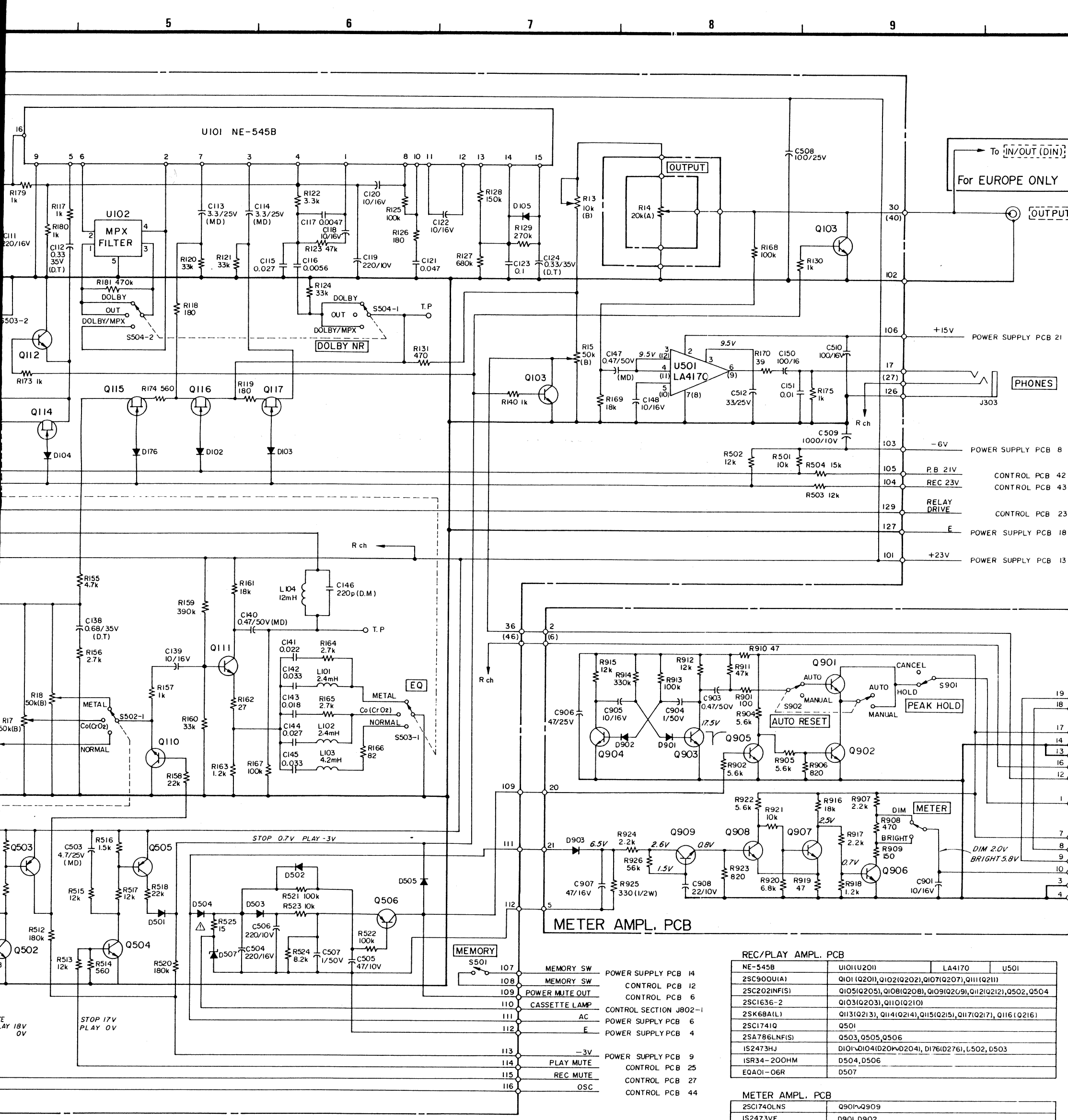
A-500MKII

Stereo Cassette Deck



NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED
   RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M
2. ALL CAPACITOR VALUES ARE IN MICROFARADS (p =
3. SCHEMATIC DIAGRAM SHOWN FOR LEFT CHANNEL
   SOME OF THE COMPONENTS.
4. DC VOLTAGES WERE MEASURED DURING RECORD P
   UNLESS OTHERWISE NOTED.
5. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CR
   COMPONENTS. THEY MUST ALWAYS BE REPLACED W
   COMPONENTS - REFER TO THE TEAC PARTS LIST AN
   EXACT REPLACEMENT.



REC/PLAY AMPL. PCB			
NE-545B	U101(U201)	LA4170	U501
2SC900U(A)	Q101(Q201),Q102(Q202),Q107(Q207),Q111(Q211)		
2SC202INF(S)	Q105(Q205),Q108(Q208),Q109(Q209),Q112(Q212),Q502,Q504		
2SC1636-2	Q103(Q203),Q110(Q210)		
2SK68A(L)	Q113(Q213), Q114(Q214),Q115(Q215),Q117(Q217), Q116(Q216)		
2SC1741Q	Q501		
2SA786LNF(S)	Q503,Q505,Q506		
IS2473HJ	D101~D104(D201~D204), D176(D276),L502, D503		
ISR34-200HM	D504,D506		
EQA01-06R	D507		

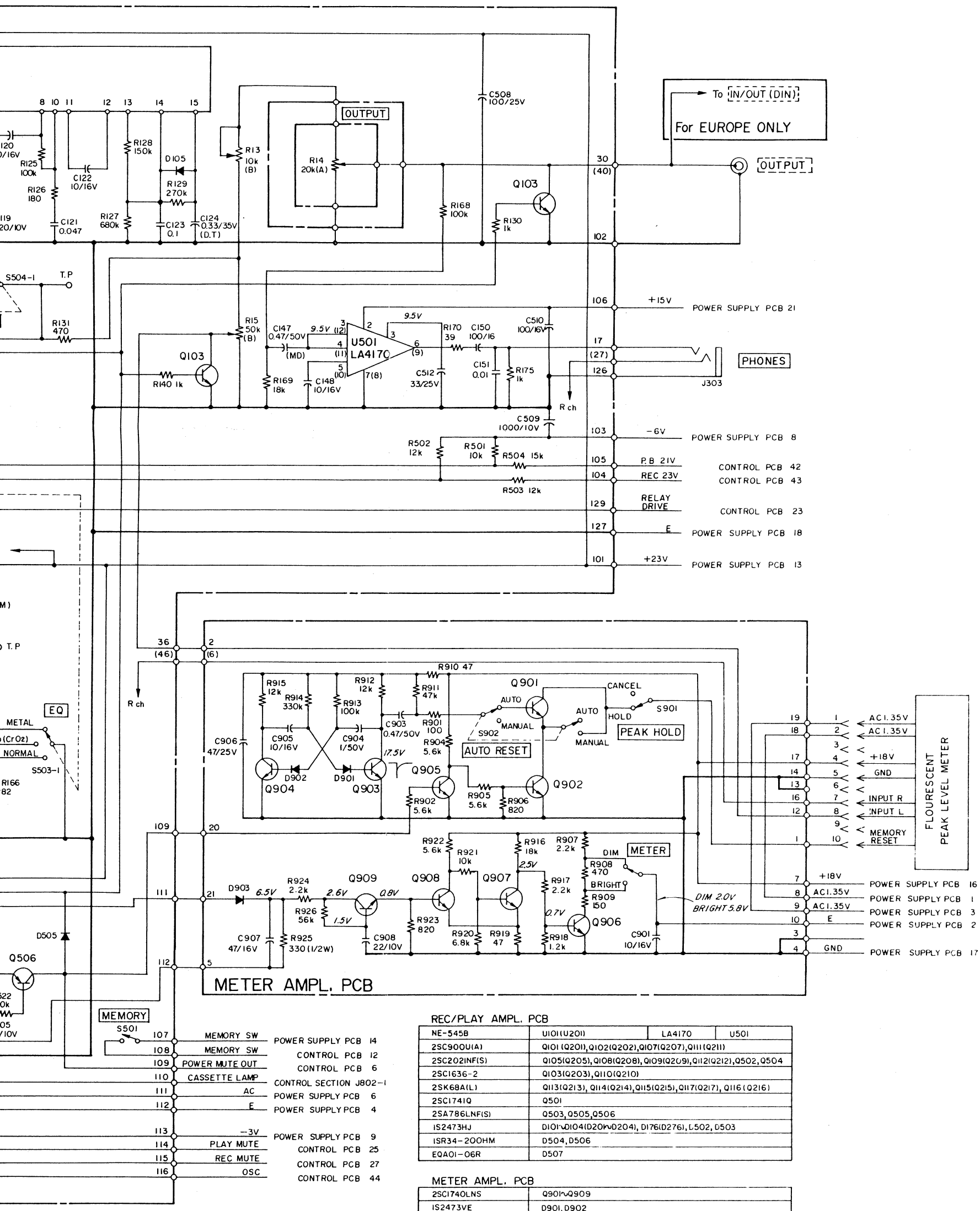
METER AMPL. PCB	
2SC1740LNS	Q901~Q909
IS2473VE	D901,D902
ISR34-200VL	D903

NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
2. ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
3. SCHEMATIC DIAGRAM SHOWN FOR LEFT CHANNEL EXCEPT FOR SOME OF THE COMPONENTS.
4. DC VOLTAGES WERE MEASURED DURING RECORD PAUSE MODE UNLESS OTHERWISE NOTED.
5. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.

A-510MK

Stereo Cassette D



REC/PLAY AMPL. PCB

NE-5458	U101(U201)	LA4170	U501
2SC900U(A)	Q101 (Q201),Q102(Q202),Q107(Q207),Q111(Q211)		
2SC202INF(S)	Q105(Q205),Q108(Q208),Q109(Q209),Q112(Q212),Q502,Q504		
2SC1636-2	Q103(Q203),Q110(Q210)		
2SK68A(L)	Q113(Q213), Q114(Q214),Q115(Q215),Q117(Q217), Q116 (Q216)		
2SC1741Q	Q501		
2SA786LNF(S)	Q503,Q505,Q506		
IS2473HJ	D101~D104(D201~D204), D176(D276),L502, D503		
ISR34-200HM	D504,D506		
EQA01-06R	D507		

METER AMPL. PCB

2SC1740LNS	Q901~Q909
IS2473VE	D901,D902
ISR34-200VL	D903

E.
OHMS).
ADS).
OR

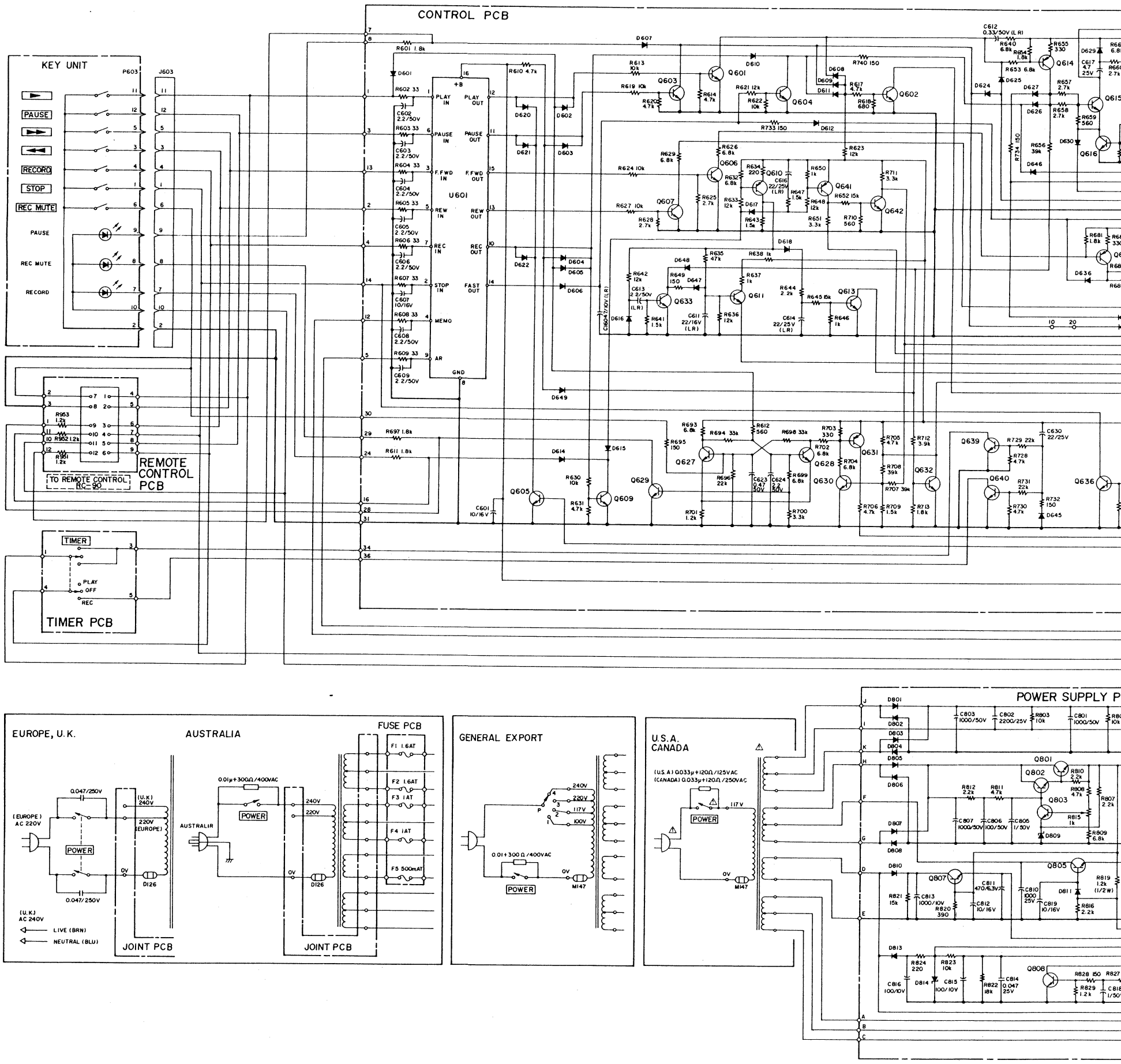
DE

TICAL

A-510MKII

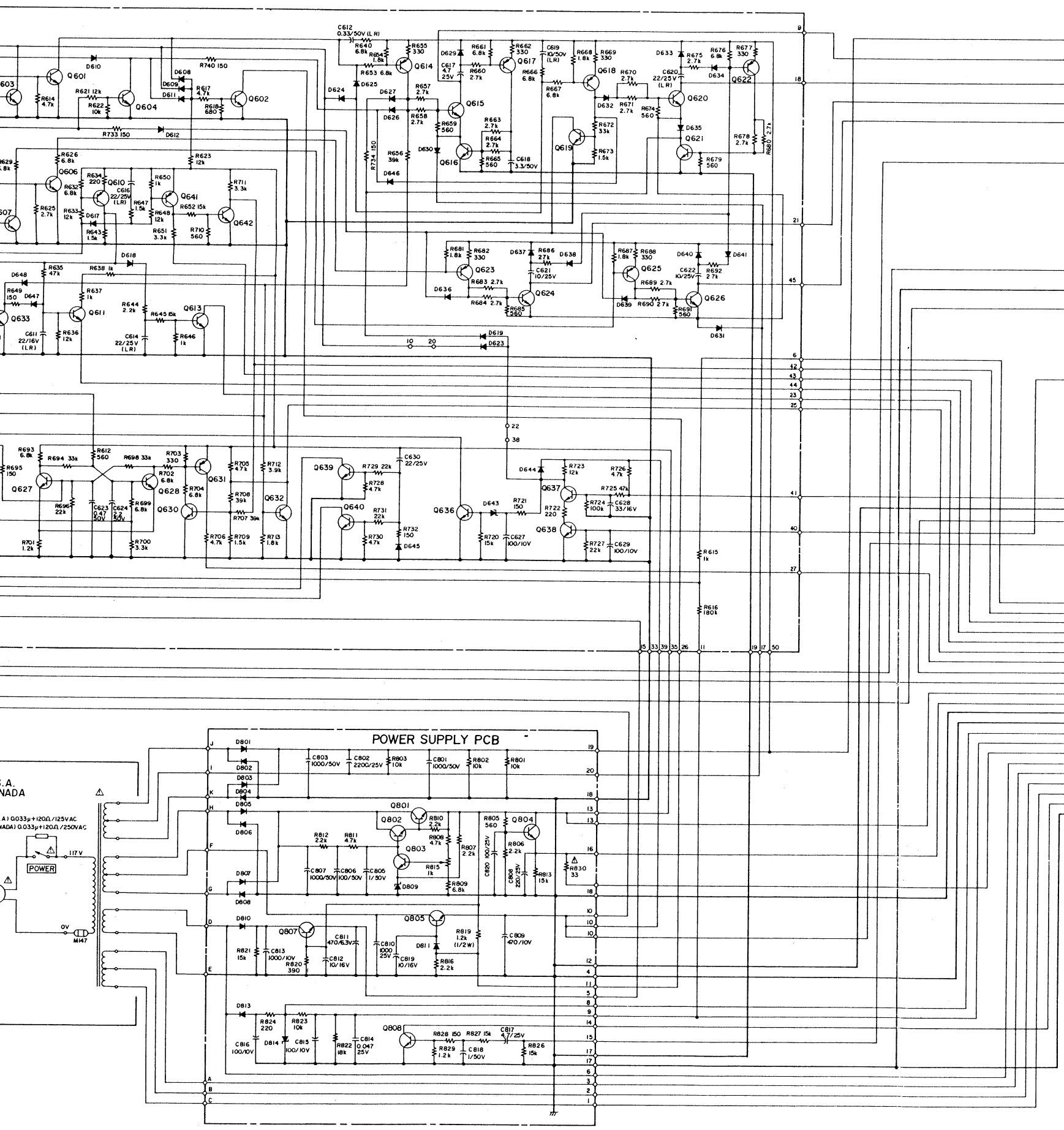
Stereo Cassette Deck

TEAC SCHEMATIC DIAGRAM (TAPE TRANSPORT) A-510MKII



NOTES

1. ALL RESISTORS ARE ¼ WATT,
2. RESISTOR VALUES ARE IN OH
3. ⚠ PARTS MARKED WITH THIS
   COMPONENTS. THEY MUST ALW
   COMPONENTS - REFER TO THE
   EXACT REPLACEMENT.

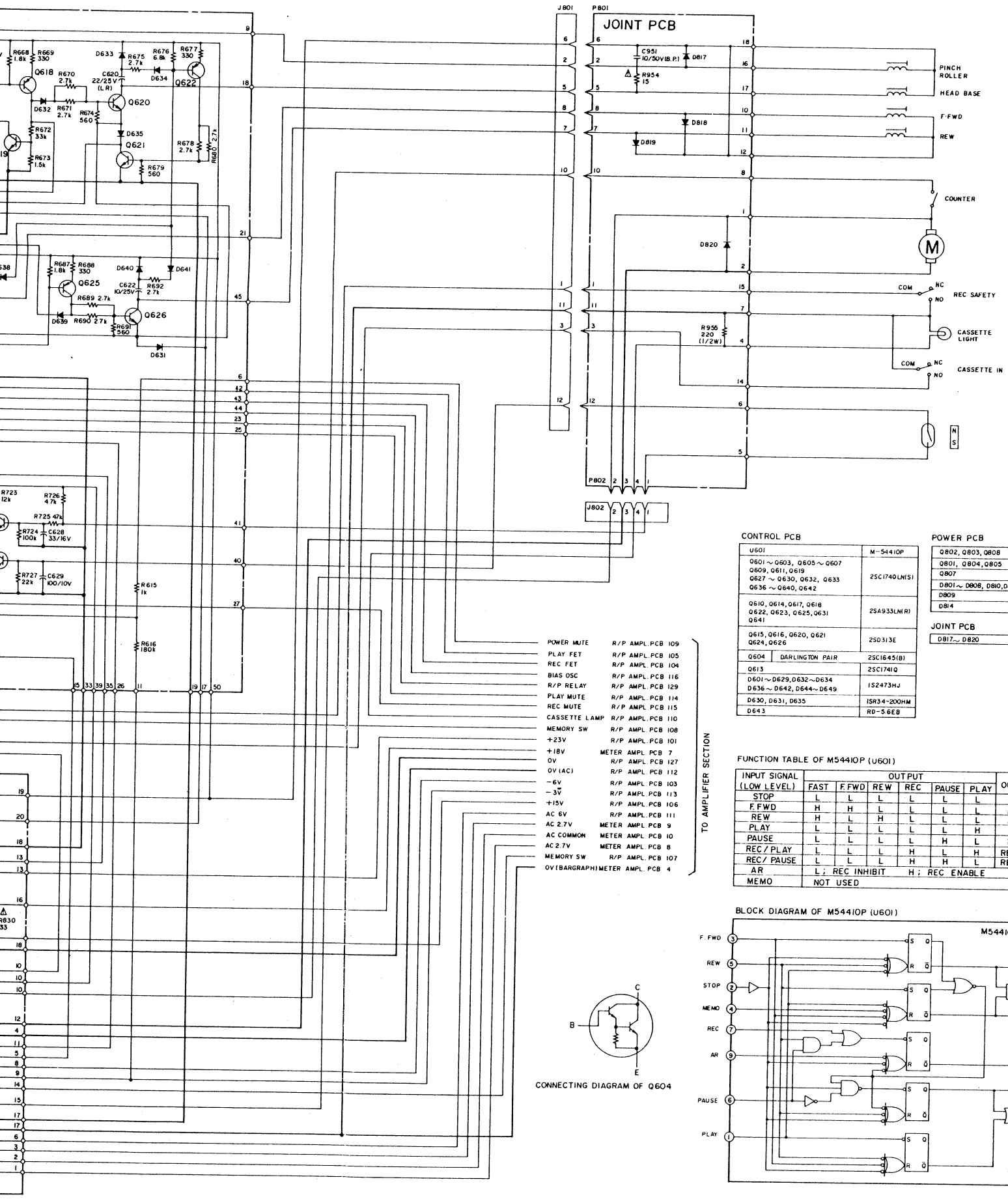


NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE.
2. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
3. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.

A-510

Stereo



CONTROL PCB

U601	M-5441OP
Q601～Q603, Q605～Q607 Q609, Q611, Q619 Q627～Q630, Q632, Q633 Q636～Q640, Q642	2SC1740LN(S)
Q610, Q614, Q617, Q618 Q622, Q623, Q625, Q631 Q641	2SA933LN(R)
Q615, Q616, Q620, Q621 Q624, Q626	2SD313E
Q604 DARLINGTON PAIR	2SC1645(B)
Q613	2SC1741Q
D601～D629, D632～D634 D636～D642, D644～D649	1S2473HJ
D630, D631, D635	ISR34-200HM
D643	RD-5.6EB

POWER PCB

Q802, Q803, Q808	2SC1740LN(S)
Q801, Q804, Q805	2SD313(E)
Q807	2SD400MP(E)
D801～D808, D810, D811, D813	1S R34-200HM
D809	RD-13EB
D814	RD-6.2EB

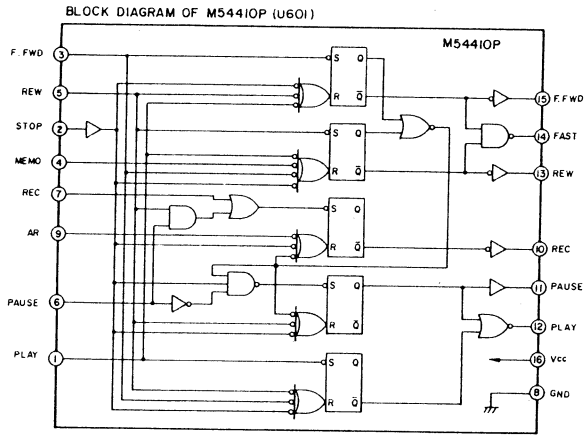
JOINT PCB

D817～D820	ISR34-400HM

FUNCTION TABLE OF M5441OP (U601)

INPUT SIGNAL (LOW LEVEL)	OUTPUT						OUTPUT MODE
	FAST	F.FWD	REW	REC	PAUSE	PLAY	
STOP	L	L	L	L	L	L	STOP
F.FWD	H	H	L	L	L	L	F.FWD
REW	H	L	H	L	L	L	REW
PLAY	L	L	L	L	L	H	PLAY
PAUSE	L	L	L	L	H	L	PAUSE
REC/PLAY	L	L	L	H	L	H	REC/PLAY
REC/PAUSE	L	L	L	H	H	L	REC/PAUSE
AR	L; REC INHIBIT H; REC ENABLE						
MEMO	NOT USED						

BLOCK DIAGRAM OF M5441OP (U601)



CONNECTING DIAGRAM OF Q604

MARKED OTHERWISE.
OHMS, M = 1,000,000 OHMS).
FETY CRITICAL
LACED WITH IDENTICAL
LIST AND ENSURE

A-510MKII

Stereo Cassette Deck